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TRAINING FOR NIGHT/LIMITED VISIBILITY OPERATIONS

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for conducting limited visibility training. The program integrates material presently existing in scattered form into a coordinated approach to BIFV unit night operations training.



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FOREWORD

Since 1975 the Army Research Institute has contributed to the U. S. Army program to develop Bradley Infantry (M2) and Cavalry (M3) Fighting Vehicles, including human factors evaluation of prototype vehicles and task analyses of crew tasks to identify special aptitude requirements. Further task analysis resulted in preparation of a set of Procedures Guides for Bradley Commanders, Gunners, and Drivers, identification of leader tactical training device requirements, and recommendations for a Bradley Leader Tactical Trainer.

As Bradley vehicles began to be introduced to combat units, the need to evaluate tactical doctrine, operational effectiveness, and training issues in a systems context became apparent. At the request of the Deputy Chief of Staff for Training, U.S. Army Training and Doctrine Command (TRADOC) a research program was formalized among the Training Technology Agency, TRADOC, the U. S. Army Infantry School, and the Army Research Institute, to define emerging operational and training problems and to undertake research to address the most critical issues affecting combat effectiveness. Because Bradley vehicles incorporate advanced weapons systems and sights to be used under darkness and reduced visibility, special emphasis was placed on research which focused on operations under these conditions.

The first year of the project resulted in definition of critical research issues and identified gunnery, tactical operations, equipment, and training as topical areas for subsequent research and development. The problem identification and supporting analyses are presented in a separate report.

The results of the second year of research are documented in a series of publications, of which the present report is one. The emphasis of the second year effort was on making products available to Bradley users as they were developed. These analyses, training materials, job performance aids, improved procedures, and equipment prototypes have thereby served immediately to increase combat effectiveness. Further interactions between the project scientists and the user community have resulted in additional improvements and refinements. As a result of this approach the project has been unusually responsive to both the U. S. Army Infantry School and Bradley units worldwide.

TRAINING FOR NIGHT AND LIMITED VISIBILITY OPERATIONS

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PROBLEM DEFINITION

The ARI/Litton research team conducted an up-to-date assessment of the Threat during the problem analysis phase of this project. The focus was upon those aspects of Soviet organization, tactics and techniques which have the greatest impact upon the employment of the Bradley Infantry Fighting Vehicle.

Soviet operations are characterized by constant activity day and night. Night insertions and extractions of mobile detachments by air, land or water are likely. These forces may be large to provide extra firepower to the rear or small to collect additional reconnaissance information. Night operations are viewed as extensions of daylight activities. Limited visibility operations can be expected when Soviet objectives have not been achieved before nightfall.

Soviet use of limited visibility conditions is comparable to use of an offensive weapon. For example, the Soviets employ smoke in three ways; (1) screening smoke is used to cover the movement of Soviet forces and hinder enemy target acquisition efforts; (2) deceptive smoke is used to mislead the enemy as to the true objective and avenue of approach; (3) blinding smoke is used on the objective to blind enemy gunners and degrade their sighting systems.

Soviet forces are well practiced in many aspects of the training required to implement their limited visibility doctrine. Lengthy marches, resupply of troops and weapons, movement to alternative firing positions, and construction of fortifications are emphasized and performed at night. During the night, reconnaissance and security activities are increased. March columns are shortened and extra traffic controllers are used. Observers with night vision goggles are dispersed among the units.

The Threat assessment served as a perspective for research team members during the field trips to observe BIFV units in USAREUR and CONUS. It was noted that there was a particular lack of awareness of the need to train for reaction to Soviet doctrine pertaining to limited visibility operations.

Comments to ARI/Litton research team members from company and higher level commanders indicated that they believed subordinate units were conscious of the problems associated with night operations and were taking proper action. However, the actual field observations revealed a number of serious deficiencies. It is difficult for mechanized Company Commanders to conduct operational inspections at night when platoon elements are widely dispersed and movement is difficult, occasionally dangerous, and always produces noise. Therefore, command visitations are rare and perceptions of unit readiness to operate at night do not coincide with reality.

It was observed that units failed to bring night vision goggles, Starlight scopes, Dragon night sights and other Surveillance, Target Acquisition and Night Vision (STANO) devices to the field for exercises. Only the BIFV integrated sight unit (ISU) and the driver's night sight were employed in most night operations. Occasionally, an individual platoon leader or a company commander used the AN/PVS-5 night vision goggles for relatively short-range surveillance or to check a map. However, night vision devices were not given high priority by any of the forces observed.

Although training directives dictate that one-third of all tactical training be conducted under limited visibility conditions, examination of current unit training schedules indicates that this is not being done. Field personnel queried by research team members indicated that the conduct of training specific to limited visibility conditions is hampered by the lack of adequate guidance on the optimal content and methods for such training. Research team members verified that the BIFV community does not have a Program of Instruction (POI) specific to limited-visibility conditions.

Therefore, the objective of preparation of an up-to-date program of instruction for night operations training was identified as a high payoff research topic to be pursued by the ARI/Litton research team during the second year of the project. The following sections describe the approach taken to realize this objective and a brief description of the product.

APPROACH

The preparation for development of the training content and training strategies to be included in the Night Training Program (NTP) involved the meshing of multiple approaches. The training development expertise required for this work was drawn from research team members who are experienced in behavioral science applications to training development and/or knowledgeable about the critical aspects of night operations through prior military service.

A number of varied sources were utilized during this work. The literature review conducted by the research team during the first year problem analysis phase was a primary source for identification of tasks and useful training strategies. In particular, the literature pertaining to threat force analysis, the capabilities and limitations of STANO devices, and human performance under limited visibility conditions was re-examined.

A second source was the extensive review of USAIS mechanized infantry training that was conducted by the research team. The advance courses for officers and noncommissioned officers were re-examined, with the focus on training blocks dealing with night operations content and practical exercises. Also, the reverse cycle portions of BIFV-specific courses were addressed particularly. Compilation of information from multiple resident courses helps isolation of effective training approaches for retention in the POI to be developed, and ineffective practices to be avoided.

Contact with SMEs in the field regarding their perceived requirements for a night training POI was a third important source of background information. Points of contact among the USAIS training cadre were consulted. The trip reports from the on-site visits to BIFV units in USAEUR and CONUS, conducted by the research team during the problem analysis phase, were re-examined. Finally, the research team member principally responsible for POI development was an invited participant at a night operations workshop hosted by the Combined Arms Center, 12-13 March, 1985. Other attendees were representatives from the branch centers/schools who could speak for their respective

commandant concerning night operations doctrine. Each representative briefed his functional area, at the maneuver battalion/ battalion task force level, in the following format:

- o Planning and employment considerations;
- o Functional area support of combat operations at night;
- o Training considerations.

The workshop was planned and hosted by CAC for the purpose of obtaining input for the first draft of FC 90-1, Night Operations. The agenda afforded the ARI/Litton research team member with ample opportunity to exchange views on night operations doctrine and training with an Army-wide sample of SMEs. Training approaches of proven effectiveness, and innovative ideas capable of development and implementation, were incorporated in the development of the BIFV NTP.

These multiple approaches were integrated to produce a comprehensive listing of the individual and collective tasks to be emphasized in a BIFV-specific NTP. These included activities which are required only when limited visibility conditions prevail, and daytime tasks which are particularly difficult or performed in a modified manner when natural or artificial obscurants limit visibility. Next, appropriate training strategies for the identified tasks were selected or developed (using lessons learned from the training community and innovative approaches formulated by the research team). The complete program is presented at Appendix A and an overview is given in the following section.

THE BIFV NIGHT TRAINING PROGRAM (NTP)

The ARI/Litton POI for BIFV NTP follows a standard military format. An outline of the content and organization is presented below:

- o PREFACE
 - POI Description
 - Training Notes
- o BODY
- o TRAINING ANNEXES
 - STANO Devices
 - Maintenance
 - Weapons
 - Gunnery
 - Tactics
 - Safety
- o EQUIPMENT AND AMMUNITION SUMMARY

- o CORRELATION OF TRAINING OBJECTIVES TO REFERENCES
- o REFERENCES
- o TRAINING GRID
- o STANDBY DEVICE DISTRIBUTION

The intended audience for this unit training NTP is the platoon/squad level trainer. Therefore, the training notes directly address the needs and characteristics of this user group. The initial notes establish the importance of NTP, and the way to use the NTP to organize and conduct maximally effective unit training in night fighting. Additional notes address general aspects of conducting night training and the potential distractors impacting upon the motivation and learning of the troops being trained under limited visibility conditions. Guidelines are given for innovative techniques to: (a) counteract training distractors; (b) overcome limitations in training resources and available training areas, and, (c) capitalize on available daytime training hours and indoor training environments to simulate the essential aspects of limited visibility conditions in the field.

The training annexes detail training objectives, conditions and standards for essential night fighting tasks. The information necessary for tailoring training content and sequencing to the needs of individual units is presented in these sections. Other sections of the NTP list essential training references readily available in the units and correlate the training objectives to the appropriate reference(s). A training grid suggests appropriate calendars for annual schedules. Finally, all essential administrative details for conducting effective unit training are treated in several sections.

The draft NTP was staffed with SMEs representing the U.S. Army Infantry Center/School and cadre of T0&E units. Revisions of content and organization per suggestions from this source were completed.

CONCLUSIONS AND RECOMMENDATIONS

The ARI/Litton Night Training Program (NTP) is designed to fill the presently existing void in guidance to BIFV units for conducting limited visibility training. Unit trainers can draw immediate benefit from the contents of the NTP in its present form. Therefore it is recommended that:

- o The present version of the Night Training Program be circulated among trainers in active BIFV units. Requests for Comment/Amplification/Modification are essential to development of future, more detailed and specific training guidance.

Future work should be directed toward development of a second iteration of this NTP. Comments and suggestions from the field should be used to improve the initial version. Also, the recent training developments accomplished by the ARI/Litton research team during work in other areas reported upon here and in the companion report on gunnery procedures should be included in the second

iteration. For example, the modified training in use of the thermal mode of the ISU for target detection and range estimation could be inserted in an appropriate section of the initial NTP. Therefore it is recommended that:

- o Future work be performed by an appropriate action agency to produce and evaluate an expanded Night Training Program that incorporates newly developed night fighting concepts, training devices, job aids and training strategies.

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APPENDIX A

NIGHT TRAINING PROGRAM

(BIFV, M2)

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FOREWORD

This night training program (NTP) addresses the training of Bradley Infantry Fighting Vehicle individuals and units at night in the skills needed for combat. The NTP presents technical aspects, tactical skills, and logistic considerations associated with night combat training. The NTP was prepared using data from CACDA sources; TRADOC school inputs; the USAIS programs of instruction for IOAC, IOBC, ANCOC, and the BIFV specific Bradley Commander, Master Gunner, and gunner courses; field manuals, circulars, research papers, articles from military magazines, scientific studies, and related documentation.

EDGAR M. JOHNSON
Technical Director

SECTION I
INTRODUCTION

1.1 General.

Training for night operations has always presented many large and confusing problems to unit leaders. This night training program (NTP) addresses the major areas of night training and ties together contemporary doctrine and the technical aspects of planning, conducting, and improving night training. The intent of the NTP is to provide the BIFV small unit trainer with answers to the questions: What references can be used? What tasks require training? What equipment is needed? How long will it take? Will it be worth it?

1.2 Purpose.

The purpose of this NTP is to provide the U.S. Army with a source document which describes how to conduct effective night training. It addresses doctrinal, training, personnel, equipment, and time constraints by:

1. Providing training notes, tips, and required references.
2. Listing the tasks to be trained.
3. Listing equipment and ammunition requirements.
4. Providing specific training objectives in task, condition, standard format.
5. Establishing a training sequence.
6. Supplying training guidance which is realistic and attainable.

1.3 Scope.

This NTP is designed to provide the small unit trainer with guidance required to train BIFV squad, platoon, and company level personnel in night and limited visibility combat.

SECTION II

PREFACE

A. POI DESCRIPTION:

1. TITLE: Night Training Program (NTP) (BIFV, M2).
2. PURPOSE: To provide BIFV small unit trainers with guidelines for conduct of night training unit readiness. MOS for which trained: 11M.
3. SCOPE: The key subjects in this NTP are STANO devices training, maintenance, weapons, gunnery, tactics, and safety.
4. TRAINING ENVIRONMENT: Field environment, reversed cycle training, at night.
5. DURATION: 115 hours, or, 8 work days, approximate.

B. TRAINING NOTES (TN):

TN1: The Soviets and Warsaw Pact nations pose the greatest threat to the US forces and our allies. The Soviets train "at night -- according to daytime standards" to maintain the doctrinal "spirit of the offense." Soviet ground forces employ a large number of night operations equipment and their training programs show that up to 40% of all individual and unit tactical training time is night oriented. Soviet sources indicate that night operations are integral to the Soviet Army doctrine of continuous operations.

Much of Soviet use of night combat comes from their war history. During World War II, the Soviets were known for their night and early morning attacks on the Germans. Artillery preparations frequently preceded these attacks and artificial light was used to illuminate the targets once surprise was lost. River crossings and retrograde operations also were accomplished under the protection of darkness.

Soviet operations are characterized by constant pressure day and night. Night operations are viewed as extensions of daylight activities. Mobile detachments are likely to be inserted and extracted in the night by air, land, or water to assist in accomplishment of the mission. These forces may be large to provide extra firepower to the Soviet's enemy's rear or small to collect additional reconnaissance information.

The night and limited visibility capabilities of the Soviets are extensive. Soviet doctrine calls for continuous operations on the battlefield. Some of the actual training is unrealistic and sporadic. At present, light discipline is poor among troops and river crossings usually occur only in daylight hours.

However, Soviet forces are well practiced in some aspects of night training. Lengthy marches, resupply of troops and ammunition, movement to alternate firing positions, and construction of fortifications are emphasized and performed at night. During the night, reconnaissance and security activities are increased; march columns are shortened and extra traffic controllers are used; observers with night vision equipment are dispersed among the units. Night frontages are considered the same as day frontages but rates of advance slow to 1.5 to 2 km per hour.

Limited visibility operations can be expected when objectives have not been achieved by normal light. The Soviets train with different colored lights, flares, guide posts, and armbands to mark objectives, troops and equipment. Soviet use of limited visibility can be compared to an additional weapon which is to be used when appropriate.

Conversely, there is no single document produced by the US which addresses the night training of soldiers. Many documents address aspects of night operations, but none focus on training of night skills and tasks as they pertain to the BIFV. Because of this lack information, commanders and leaders find it hard to concentrate their efforts on night training and are constantly searching for the information that they need to train their units at night.

Although most training directives dictate that one-third of all tactical training be performed in darkness or under limited visibility conditions, examination of training schedules indicates that this is not being done. This is reflected in the units' inability to operate at night and a general unfamiliarity with night vision devices.

Field observations have revealed a number of serious training deficiencies. Units failed to bring night vision goggles, Starlight scopes, Dragon night sights and similar equipment to the field for exercises and a number of squad leaders failed to bring or were unable to obtain binoculars for field use. Even units with night vision devices did not use them in most cases. Only the integrated sight unit (ISU) and the driver's night sight were employed in most night operations. Occasionally, a platoon leader or a company commander used the AN/PVS-5 night vision goggles for relatively short-range surveillance on an individual basis and/or to check a map. However, night vision devices were not high on the consciousness level of any of the forces observed.

The BIFV is exceptionally vulnerable to dismounted enemy destruction when it does not employ dismounted crew-served weapons with night sights and make use of other night fighting alert devices. The ISU is not intended to counter local enemy operations and it does not. Only good local dismounted night security will lessen the BIFV's inherent vulnerability during conditions of limited visibility.

TN2: This NTP will provide leaders, trainers, and soldiers with the information required to perform specific tasks under stated conditions to specific standards to achieve BIFV training objectives in the areas of STANO devices, maintenance, weapons, gunnery, and tactics. All of the tasks are to be performed in darkened conditions (indoors or out).

The following synopsis of Annexes A through F provides a NTP summary.

Annex A, STANO Device Training: This annex provides task, condition, and standard criteria for those STANO devices which are organic to BIFV units IAW the J-series MTOE. Hands-on component device training is vital for soldiers if they are to fight in combat using the unit's organic STANO devices. Night vision devices do NOT turn the night into day. Each device exhibits peculiarities soldiers must understand if they are to use the devices with competence. Properly planned and executed training will insure success in the accomplishment of the tasks found in this NTP.

Annex B, Maintenance: Addresses those maintenance tasks which all BIFV personnel need to know how to do -- and how to do well -- at night. Maintenance under night or LIMVIS conditions is slow and potentially hazardous. If attempted during inclement weather without adequate training the tasks will become frustrating and difficult to accomplish. Training and practice under LIMVIS and inclement conditions is vital to accomplishment under combat stress.

Annex C, Weapons: This annex presents night oriented tasks which will enable a member of a BIFV crew to successfully operate the weapons at his disposal. Successful task completion provides the crew with cross-training so that crew members can substitute for each other as combat losses occur.

Annex D, Gunnery: BIFV night gunnery skills and techniques require intensive and careful ISU training. Engagement requires that the gunner be able to detect, acquire, identify and fire at targets whose images are very different through the thermal sight than they appear in the daysight. Soldiers must first be familiar with target signatures, fire commands, tracking techniques, and the ammunition with which each type of target is engaged.

Annex E, Tactics: This portion of the POI is designed to provide all BIFV soldiers with the ability to become proficient in critical combat skills. Each soldier will be required to perform his tasks and those tasks his subordinates perform, to the best of his ability, for his level of the operation, (e.g. leaders will be required to perform leader's, gunner's, and crew tasks; gunners will perform gunner's tasks as well as crew member tasks.)

Annex F, Safety: The objectives provided allow the trainer maximum discretion in presenting the topic, as generally or as specifically, as is required to fit the unit's current safety program. The safety topics permit increased emphasis on the night/LIMVIS environment. Darkness makes manual tasks more difficult than they are in lighted conditions: safety must be more rigidly enforced to insure that training time is not lost and that senseless injuries do not occur.

TN3: Section V contains an equipment and ammunition summary which allows the trainer to see-at-a-glance what and how much equipment and ammunition is required to conduct training; Section VI is a correlation of training objectives to pertinent references; Section VII is a list of the references required by the trainer for conduct of proper night training; Section VIII depicts a training grid which shows the trainer who is to be trained and on which training objective to achieve primary and alternate competency of the duties to be performed; and Section IX is a STANO device distribution chart (adapted from TO&E 07245J410, dated 05/08/84), which allows unit trainers to know the items of equipment that should be present in the unit.

TN4: Training in units day, or night, is broken down into the following areas: purpose, characteristics, and training methods used by units. FM 25-2 states the following:

PURPOSES OF TRAINING

Leaders train soldiers, subordinate leaders, and units to:

- + Develop individual and collective proficiency on new tasks and missions as assigned.
- + Sustain individual and collective proficiency on tasks and missions previously trained to standard.

Training for company and below is concerned with:

- + Developing and sustaining company-level collective proficiency.
- + Developing and sustaining individual, leader, and collective proficiency of subordinate company elements.

The primary purpose of training is to develop and sustain unit proficiency. Other purposes include conducting professional development classes for leaders, motivating unit personnel, and building the soldier's self-confidence and sense of team cohesiveness.

Training is based on specific tasks, conditions, and standards provided by unit leaders. During training, performance is continually evaluated by trainers so they can effectively coach soldiers. At the end of training, performance is measured for compliance with stated conditions and standards. If routine work is performed in this same manner, it can also be considered as training.

The most important aspect of training is whether soldiers, leaders, and units can perform their assigned missions or tasks after the training has ended. How the trainer conducts the training session is less important than the results attained. How training was conducted only becomes important when it does not produce the desired results or uses resources inefficiently.

CHARACTERISTICS OF UNIT TRAINING

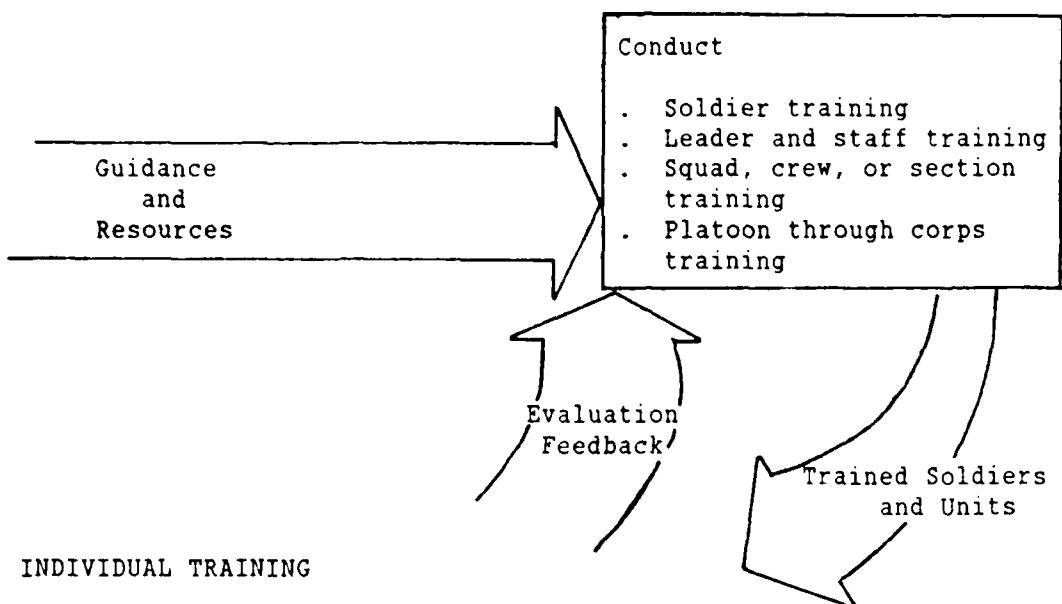
To plan, conduct, and evaluate training, the characteristics of training must be understood. Good training --

IS TACTICALLY AND TECHNICALLY CORRECT, CAUSES LEADERS AND SOLDIERS TO LEARN, BUILDS TEAMS, IS CONDUCTED BY AND DEVELOPS LEADERS, IS REALISTIC, CORRECTS WEAKNESSES AND CAUSES UNITS/SOLDIERS TO ATTAIN AND/OR RETAIN PROFICIENCY.

TRAINING IN UNITS

Training in units involves learning and sustaining proficiency in individual and collective skills that units (including squads, crews, and sections) need to accomplish their mission. The commander must develop and implement the best mix of individual and collective training in order to help soldiers learn and sustain proficiency in skills needed. This training is often part of platoon, company, and battalion exercises.

TRAINING PHASE



INDIVIDUAL TRAINING

This is training of individual officers, NCOs, or enlisted soldiers on tasks each individual must be able to perform. It is conducted to sustain skills previously learned and to develop additional skills. Developing basic individual skills before training more advanced skills results in less confusion, more efficient use of resources, and higher morale. Most individual training is conducted by unit leaders. However, some technical and leader training is conducted within unit schools. Individual training programs include:

Leader Training. Leader training is based on what leaders, soldiers, and units will do in war and how they will do it. It develops a leader's ability to train and lead. A unit's leader-training program prepares leaders to perform their tasks, employ tactics, use equipment, and make the required timely decisions.

Soldier Training. This is training of soldiers on MOS tasks. Critical MOS tasks appear in MOS-specific soldier's manuals.

COLLECTIVE TRAINING

Teamwork in battle depends on those individual and collective skills developed at squad, section, platoon, and company level. Collective training builds combat teams that can accomplish their wartime missions. Initial squad, crew, or section training helps leaders and individual soldiers understand how their actions relate to other team members' actions.

Training Individual Tasks During Collective Training. Since collective tasks and missions are made up of individual, leader, and team tasks, these subordinate tasks can often be trained during collective training. This is

particularly true of sustainment training. Sustainment training maintains the individual, leader, or team proficiency to desired standards on previously learned tasks.

Multi-echelon Training. Soldiers are grouped by echelon or position then the groups are trained separately, but simultaneously to meet specific training needs at their echelons. The tasks trained are individual, collective, or both, and are not necessarily related.

Concurrent Training. Groups of soldiers train simultaneously on different tasks. These tasks may or may not be related. For example, a leader may subdivide the unit at a night rifle range into firing orders. Soldiers who are not firing may train on preliminary night marksmanship, night target detection, and similar subjects.

UNIT TRAINING OF NEWLY ASSIGNED AND INEXPERIENCED INDIVIDUALS

Training programs must make allowances for newly arrived individuals without previous training on new equipment. Some may be reassigned from units or agencies which do not have like equipment, and whose organization or doctrine is different. For others, this may be their initial unit assignment.

Night operations training is conducted in the same manner as other unit training, except that the training is performed during the hours of darkness. CACDA FC 90-1 Night Operations states that training at night can be accomplished in three ways: (1) at night as a follow-on to day training, (2) at night for an extended period of time (reversed cycle training, e.g., 2100-0600 hours), and (3) night and day for a designated time period as part of a continuous operation scenario (e.g., 5 day FTX).

The best methods for the conduct of night training are:

A. Reversed Cycle Training. "Reversed cycle" training not only enables the soldier to adjust physiologically and psychologically to night operations, but provides continuity to a unit night training effort. The length of the reversed training cycle and the frequency with which it is scheduled are critical factors affecting the efficiency of the training and the proficiency to be attained. The length and frequency of reversed training cycles will vary from unit to unit. No optimum reversed cycle training period can be specified for all units. However, the training goal is the same; to achieve and sustain unit proficiency and confidence in operating at night. The following guidelines are useful in tailoring a reversed cycle training program:

1. Individual soldiers require from three to five days to begin physiological adaptation to a night training cycle. During the period of adaptation, performance is likely to be impaired and the benefits of the reversed cycle not fully realized. To be effective, a reversed cycle should be at least five days long.

2. After three to four weeks on a night cycle, physiological adaptation is essentially complete. However, training efficiency will again be

degraded during the period of adjustment back to a day cycle. Generally, the night cycle should not exceed three weeks in length.

3. The length and frequency of reversed cycle training will vary with unit size and level of operational proficiency. Generally, larger units will schedule longer cycles to permit building up to integrated combined arms night exercises. Those units that are already proficient in night operations will use reversed cycle training primarily to sustain their capability. Trained units can benefit more from frequent, shorter reversed cycles.

4. Extended duration reversed cycle training is difficult to schedule and coordinate below battalion level because many necessary, but non-combat essential, requirements occur during the soldier's "normal" duty day. These demands can severely impact on night training much as they do on daylight training. Reversed cycle training is most efficient when scheduled by the brigade or division so that many of these competing demands can be rescheduled or diverted to other units.

B. Continuous Cycle Training. Development of night operational proficiency and confidence, to the level that units can fight as effectively at night as during the day, require periodic, continuous cycle training. This does not, however, minimize the importance of normal and reversed cycle training. Each of these three techniques has value and should be used in combination to achieve and sustain night fighting proficiency and confidence.

1. Continuous cycle training enables units to train under conditions that closely approximate those of the modern battlefield. The stress on the combined arms team resulting from continuous combat operations is best accomplished by continuous cycle training. Sleep plans, "maintenance-as-you-go," and a constant "tactical mind-set" required for successful combat operations are approximated best through continuous cycle training.

2. In USAREUR, continuous cycle training is best done during a unit's rotation through a major training area (MTA) or maneuver rights area (MRA). The various elements of the combined arms team are integrated into the training as the individual units focus their training on the mission-critical tasks. Commanders enforce the multiechelon training approach by establishing realistic training objectives for each echelon, by concurrently training, and through conduct of after-action reviews and critiques.

3. Continuous cycle training is a culmination of the unit night and day training program. Common sense indicates that to maximize the training value of continuous cycle training, units should first achieve night operations proficiency from reversed cycle night training techniques.

TN5: A lack of imagination in training plan development, poor use of training aids and unrealistic scenarios unfavorably impact on the soldier's motivation to train. Night operations training is hampered in most units by the soldier's negative reactions to previous poorly executed night training. Usually, the soldier is tired, bored, and nonproductive. In order to overcome this negative attitude, leaders and trainers must develop rigidly enforced training schedules which enable the soldiers to obtain sufficient rest between training periods. Soldiers must become used to the idea of training at night,

and compensatory time must be provided for those soldiers who must attend appointments during the daytime, their new sleeping hours. Additionally, leaders must reduce the disruptions caused by working in a reversed cycle when support activities are operating on a normal daytime schedule.

Biologically and psychologically, fatigue causes disorientation, confusion, and error. The soldiers must be made to adjust to and understand that although the clock indicates 0230 hours, the training "day" still has 3-4 hours left. A "chow break" (e.g., soup, coffee, cocoa, and sandwiches) at, or about, 0200-0330 hours nightly will interrupt the soldier's normal sleep cycle and help keep him awake. An interruption of the normal sleep cycle causes some chemical imbalances in the body which also add to individual stress. The physical reaction to the added stress may result in aggressive behavior in some soldiers, or lethargic attitudes in others. Lethargy may cause some soldiers to become unsafe in their actions around the BIFV. Until soldiers are adjusted to reversed cycle body rhythms, stress will be a large factor impacting upon the success of a unit's training program. Once the reversed training cycle is completed, a 30-day period may be required to completely readjust the soldier's body rhythms to the "normal" cycle.

TN6: This proposed Night Training Program (NTP) encompasses approximately 115 total training hours. If a concurrent, round-robin, or station-to-station concept is used, the training time may be shortened for those tasks which do not involve a tactical combat scenario. Many training objectives can be accomplished in garrison or in the field. These train-up tasks, when completed, will give the soldiers the skills needed for night tactical combat operations.

Some examples of these train-up task are: Night movement; light, noise, and movement discipline; and assembly/disassembly/maintenance/functioning of NODS, STANO devices.

TN7: Night nuclear, biological, and chemical (NBC) activities are hampered by a lack of visual cues: i.e., inability to see oily substances on leaves or grass. Because visual cues are lacking, individuals and units must rely upon training, sound, and smell. The overflight of unidentified aircraft or the sound of impacting mortar/artillery fire can alert a unit that enemy NBC activities may be taking place in the area. Unidentifiable odors or odors which are characteristic of known harmful NBC agents also can warn of hostile NBC activity. However, since these sound and smell cues are not always reliable, the unit must train its personnel in various Mission Oriented Protective Posture (MOPP) levels so the unit is competent in all MOPP conditions and can operate freely, whether it is at MOPP 1 or MOPP 4.

When attacking, the continuous monitoring of forward areas is essential to preclude a unit from moving into and through a contaminated area without realizing it. Therefore NBC trained personnel and their equipment must be well forward. On the defense, units must remain alert, continuously monitor the environment, and in the appropriate MOPP level clothing to insure it is not surprised by a sudden hostile NBC attack. When NBC agents have been employed in the unit's vicinity, all leaders down through squad must insure their personnel are informed and able to take protective action as required.

White lights must be used to "read" the NBC litmus test kit results to preclude colored light (red or blue) from falsifying the results. White light can be quickly used, under cover of a poncho, and the personnel exposed to the light can keep one eye closed to minimize night vision degradation.

Dismounted movement at night exposes soldiers to the effects of agents which are lingering in an area, undetected by testing, but possessing residual or cumulative effects. Mounted movement in a BIFV can be rapid. Therefore, the NBC monitoring devices and trained personnel must be placed far enough forward to give the unit adequate and early detection.

SECTION III

BODY

COURSE TITLE: NIGHT TRAINING (BIFV, M2)

SUBJECT HOURS: 115 (Approximate)

<u>ANNEX TITLE</u>	<u>HOURS</u>	<u>ANNEX</u>	<u>PAGE</u>
STANO Device Training	24	A	IIIA01
Maintenance	18	B	IIIB01
Weapons	1	C	IIIC01
Gunnery	10	D	IID01
Tactics	60	E	IIIE01
Safety	2	F	IIIF01

SECTION IV

Training Annexes

ANNEX A: STANO DEVICES

TRAINING OBJECTIVE: A001

TASK: Perform before operating checks on the AN/PVS-4; night vision sight, individual served weapons (starlight scope).

CONDITION: In darkness, given an AN/PVS-4.

STANDARD: Entire unit will be able to perform all checks IAW TM 11-5855-312-10 within 10 minutes.

TRAINING OBJECTIVE: A002

TASK: Place AN/PVS-4 into operation.

CONDITION: In darkness, in a tactical environment, given an AN/PVS-4 and individual weapon.

STANDARD: Entire unit will be able to place the AN/PVS-4 into operation IAW TM 11-5855-312-10 within 5 minutes.

TRAINING OBJECTIVE: A003

TASK: Utilize an AN/PVS-4 in a surveillance role.

CONDITION: In darkness, in a tactical environment, given an AN/PVS-4 and individual weapon.

STANDARD: Entire unit will properly employ an AN/PVS-4 and correctly identify 9 of 10 prepositioned/preplanned targets/activities placed within 600 meters to his front within 60 minutes of continuous observation time. (The SM is to use the AN/PVS-4 for the full 60 minutes to gain more complete training on the device.)

TRAINING OBJECTIVE: A004

TASK: Take an AN/PVS-4 out of operation and perform after operations checks.

CONDITION: In darkness, given an AN/PVS-4.

STANDARD: Entire unit will be able to perform all operations IAW TM 11-5855-312-10 within 5 minutes.

TRAINING OBJECTIVE: A005

TASK: Perform before operating checks on the AN/TVS-4; night observation device, medium range.

CONDITION: In darkness, given an AN/TVS-4.

STANDARD: CO, XO, PL, PSG, SL, ASL, will be able to perform all checks IAW TM 11-5855-312-10 within 10 minutes.

TRAINING OBJECTIVE: A006

TASK: Place AN/TVS-4 into operation.

CONDITION: In darkness, in a tactical environment, given an AN/TVS-4 and with tripod.

STANDARD: CO, XO, PL, PSG, SL, ASL, will place the AN/TVS-4 into operation IAW TM 11-5850-228-13 within 10 minutes.

TRAINING OBJECTIVE: A007

TASK: Utilize an AN/TVS-4 in a surveillance role.

CONDITION: In darkness, in a tactical environment, given an AN/TVS-4 and with tripod.

STANDARD: CO, XO, PL, PSG, SL, ASL, will properly employ an AN/TVS-4 and correctly identify 9 of 10 prepositioned/preplanned targets/activities placed within 2,000 meters to his front within 60 minutes of continuous observation time. (The soldier is to use the AN/TVS-4 for the full 60 minutes to gain more complete training on the device.)

TRAINING OBJECTIVE: A008

TASK: Take an AN/TVS-4 out of operation and perform after operations checks.

CONDITION: In darkness, given an AN/TVS-4 with tripod.

STANDARD: CO, XO, PL, PSG, SL, ASL will perform all operations IAW TM 11-5850-228-13 within 10 minutes.

TRAINING OBJECTIVE: A009

TASK: Perform before operating checks on the AN/TVS-5, crew served weapons night vision sight.

CONDITION: In darkness, given an AN/TVS-5.

STANDARD: PL, PSG, MGNR, SL, ASL, AR will perform all checks IAW TM 11-5855-214-10 within 10 minutes.

TRAINING OBJECTIVE: A010

TASK: Place AN/TVS-5 into operation.

CONDITION: In darkness, in a tactical environment, given an AN/TVS-5 and crew served weapon.

STANDARD: PL, PSG, MGNR, SL, ASL, AR will place the AN/TVS-5 into operation IAW TM 11-5855-214-10 within 5 minutes.

TRAINING OBJECTIVE: A011

TASK: Utilize an AN/TVS-5 in a surveillance role.

CONDITION: In darkness, in a tactical environment, given an AN/TVS-5 and crew served weapon.

STANDARD: PL, PSG, MGNR, SL, ASL, AR will properly employ an AN/TVS-5 and correctly identify 9 of 10 prepositioned/preplanned targets/activities placed within 1200 meters to his front within 60 minutes of continuous observation time. (The soldier is to use the AN/TVS-5 for the full 60 minutes to gain more complete training on the device.)

TRAINING OBJECTIVE: A012

TASK: Take an AN/TVS-5 out of operation and perform after operations checks.

CONDITION: In darkness, given an AN/TVS-5.

STANDARD: CO, PL, PSG, MGNR, SL, ASL perform all operations IAW TM 11-5855-214-10 within 10 minutes.

TRAINING OBJECTIVE: A013

TASK: Perform before operating checks on the AN/PVS-5, night vision goggles.

CONDITION: In darkness, given an AN/PVS-5.

STANDARD: CO, PL, PSG, MGNR, SL, ASL, perform all checks IAW TM 11-5855-238-10 within 10 minutes.

TRAINING OBJECTIVE: A014

TASK: Place AN/PVS-5 into operation.

CONDITION: In darkness, in a tactical environment, given an AN/PVS-5.

STANDARD: CO, PL, PSG, MGNR, SL, ASL place the AN/PVS-5 into operation IAW TM 11-5855-238-10 within 10 minutes.

TRAINING OBJECTIVE: A015

TASK: Utilize an AN/PVS-5 in a surveillance role.

CONDITION: In darkness, in a tactical environment, given an AN/PVS-5.

STANDARD: CO, PL, PSG, MGNR, SL, ASL will properly employ an AN/PVS-5 and correctly identify 9 of 10 prepositioned/preplanned targets/activities placed within 150 meters to his front within 60 minutes of continuous observation time. (The soldier is to use the AN/PVS-5 for the full 60 minutes to gain more complete training on the device.)

TRAINING OBJECTIVE: A016

TASK: Take an AN/PVS-5 out of operation and perform after operations checks.

CONDITION: In darkness, given an AN/PVS-5.

STANDARD: CO, PL, PSG, MGNR, SL, ASL perform all operations IAW TM 11-5855-238-10 within 10 minutes.

TRAINING OBJECTIVE: A017

TASK: Perform before operating checks on the AN/PAS-7, hand-held thermal viewer (HHTV).

CONDITION: In darkness, given an AN/PAS-7.

STANDARD: CO, PL, PSG, MGNR perform all checks IAW TM 11-5855-246-10 within 10 minutes.

TRAINING OBJECTIVE: A018

TASK: Place AN/PAS-7 into operation.

CONDITION: In darkness, in a tactical environment, given an AN/PAS-7.

STANDARD: CO, PL, PSG, MGNR place the AN/PAS-7 into operation IAW TM 11-5855-246-10 within 10 minutes.

TRAINING OBJECTIVE: A019

TASK: Utilize an AN/PAS-7 in a surveillance role.

CONDITION: In darkness, in a tactical environment, given an AN/PAS-7.

STANDARD: CO, PL, PSG, MGNR will properly employ an AN/PAS-7 and correctly identify 9 of 10 prepositioned/preplanned targets/activities placed within 400-1000 meters to his front within 30 minutes of continuous observation time. (The soldier is to use the AN/PAS-7 for the full 30 minutes to gain more complete training on the device.)

TRAINING OBJECTIVE: A020

TASK: Take an AN/PAS-7 out of operation and perform after operations checks.

CONDITION: In darkness, given an AN/PAS-7.

STANDARD: CO, PL, PSG, MGNR perform all operations IAW TM 11-5855-246-10 within 10 minutes.

TRAINING OBJECTIVE: A021

TASK: Perform before operating checks on the AN/TAS-6; night observation device, long range.

CONDITION: In darkness, given an AN/TAS-6.

STANDARD: CO, XO, PL, PSG perform all checks IAW TM 11-5855-253-10 within 10 minutes.

TRAINING OBJECTIVE: A022

TASK: Place AN/TAS-6 into operation.

CONDITION: In darkness, in a tactical environment, given an AN/TAS-6.

STANDARD: CO, XO, PL, PSG place the AN/TAS-6 into operation IAW TM 11-5855-253-10 within 10 minutes.

TRAINING OBJECTIVE: A023

TASK: Utilize an AN/TAS-6 in a surveillance role.

CONDITION: In darkness, in a tactical environment, given an AN/TAS-6.

STANDARD: CO, XO, PL, PSG will properly employ an AN/TAS-6 and correctly identify 9 of 10 prepositioned/preplanned targets/activities placed within 3500 meters to his front within 60 minutes of continuous observation time. (The soldier is to use the AN/TAS-6 for the full 60 minutes to gain more complete training on the device.)

TRAINING OBJECTIVE: A024

TASK: Take an AN/TAS-6 out of operation and perform after operations checks.

CONDITION: In darkness, given an AN/TAS-6.

STANDARD: CO, XO, PL, PSG perform all operations IAW TM 11-5855-253-10 within 10 minutes.

TRAINING OBJECTIVE: A025

TASK: Perform before operating checks on the AN/TAS-5, Dragon thermal night sight (DTNS).

CONDITION: In darkness, given an AN/TAS-5.

STANDARD: PL, PSG, MGNR, SL, ASL, AAS perform all checks IAW TM 9-1425-484-10 within 10 minutes.

TRAINING OBJECTIVE: A026

TASK: Place AN/TAS-5 into operation.

CONDITION: In darkness, in a tactical environment, given an AN/TAS-5.

STANDARD: PL, PSG, MGNR, SL, ASL, AAS place the AN/TAS-5 into operation IAW TM 9-1425-484-10 within 10 minutes.

TRAINING OBJECTIVE: A027

TASK: Utilize an AN/TAS-5 in a surveillance role.

CONDITION: In darkness, in a tactical environment, given an AN/TAS-5.

STANDARD: PL, PSG, MGNR, SL, ASL, AAS will properly employ an AN/TAS-5 and correctly identify 9 of 10 prepositioned/preplanned targets/activities placed within 1000 meters to his front within 30 minutes of continuous observation time. (The soldier is to use the AN/TAS-5 for the full 30 minutes to gain more complete training on the device.)

TRAINING OBJECTIVE: A028

TASK: Take an AN/TAS-5 out of operation and perform after operations checks.

CONDITION: In darkness, given an AN/TAS-5.

STANDARD: PL, PSG, MGNR, SL, ASL, AAS perform all operations IAW TM 9-1425-484-10 within 10 minutes.

TRAINING OBJECTIVE: A029

TASK: Perform before operating checks on the AN/VVS-2; driver's viewer, night vision.

CONDITION: In darkness, given an AN/VVS-2.

STANDARD: PL, PSG, DVR perform all checks IAW TM 9-2350-252-10 within 5 minutes.

TRAINING OBJECTIVE: A030

TASK: Place AN/VVS-2 into operation.

CONDITION: In darkness, in a tactical environment, given an AN/VVS-2 and BIFV, M2.

STANDARD: PL, PSG, DVR place the AN/VVS-2 into operation IAW TM 9-2350-252-10 within 5 minutes.

TRAINING OBJECTIVE: A031

TASK: Utilize an AN/VVS-2 in a surveillance role.

CONDITION: In darkness, in a tactical environment, given an AN/VVS-2 and BIFV, M2.

STANDARD: PL, PSG, DVR will properly employ an AN/VVS-2 and correctly identify 9 of 10 prepositioned/preplanned targets/activities placed within 500 meters to his front within 60 minutes of continuous observation time. (The soldier is to use the AN/VVS-2 for the full 60 minutes to gain more complete training on the device.)

TRAINING OBJECTIVE: A032

TASK: Take an AN/VVS-2 out of operation and perform after operations checks.

CONDITION: In darkness, given an AN/VVS-2.

STANDARD: PL, PSG, DVR perform all operations IAW TM 9-2350-252-10 within 5 minutes.

TRAINING OBJECTIVE: A033

TASK: Perform before operating checks on the AN/TRS-2, platoon early warning system (PEWS).

CONDITION: In darkness, given an AN/TRS-2.

STANDARD: PL, PSG, MGNR, SL perform all checks IAW TM 11-5895-1047-10 within 15 minutes.

TRAINING OBJECTIVE: A034

TASK: Place AN/TRS-2 into operation.

CONDITION: In darkness, in a tactical environment, given an AN/TRS-2.

STANDARD: PL, PSG, MGNR, SL place the AN/TRS-2 into operation IAW TM within minutes.

TRAINING OBJECTIVE: A035

TASK: Utilize an AN/TRS-2 in a surveillance role.

CONDITION: In darkness, in a tactical environment, given an AN/TRS-2.

STANDARD: PL, PSG, MGNR, SL will properly employ an AN/TRS-2 and correctly identify 9 of 10 prepositioned/preplanned targets/activities placed within 15 meters to his front within 60 minutes of continuous observation time. (The soldier is to use the AN/TRS-2 for the full 60 minutes to gain more complete training on the device.)

TRAINING OBJECTIVE: A036

TASK: Take an AN/TRS-2 out of operation and perform after operations checks.

CONDITION: In darkness, given an AN/TRS-2.

STANDARD: PL, PSG, MGNR, SL perform all operations IAW TM within 30 minutes.

TRAINING OBJECTIVE: A037

TASK: Utilize M19 (7x50) military binoculars in a night surveillance role.

CONDITION: In darkness, in a tactical environment, given the M19 binoculars.

STANDARD: Entire unit will properly employ the M19 binoculars and correctly identify 9 of 10 prepositioned targets/activities placed within 1000 meters to his front within 30 minutes of continuous observation time. (The soldier is to use the M19 binoculars for the full 30 minutes to gain more complete training on the binoculars.)

ANNEX B: MAINTENANCE

TRAINING OBJECTIVE: B001

TASK: Perform preventive maintenance checks and services on the hull of a Bradley M2 (071-324-1008).

CONDITION: At night, given a Bradley M2 with basic issue items (BII), TM 9-2350-252-10-1, LO 9-2350-252-12, DA Form 2404, pencil, and one assistant.

STANDARD: CO, XO, PL, PSG, MGNR, SL, ASL within 2 hours, perform before-operation (B), during-operation (D), after-operation (A) PMCS, to include lubricating and troubleshooting the Bradley M2 IAW the instructions listed in TM 9-2350-252-12, and insure all uncorrected faults are noted on DA Form 2404.

TRAINING OBJECTIVE: B002

TASK: Inspect an Infantry Fighting Vehicle (M2) for accurate crew PMCS.

CONDITION: At night, given an operator's manual for the vehicle, completed Form 2404, and tracked vehicle (M2).

STANDARD: CO, XO, PL, PSG, MGNR, SL, ASL within 3 hours, all deficiencies and 70 percent of the vehicle's shortcomings must have been recorded on a DA Form 2404.

TRAINING OBJECTIVE: B003

TASK: Break/join track on a M2 Bradley (071-324-6007).

CONDITION: At night, given a M2 Bradley with basic issue items (BII), grease (GAA), and one assistant.

STANDARD: PL, PSG, MGNR, SL, ASL, GNR, DVR within 2 hours; IAW TM 9-2350-252-10-1 and STP 7-11M1-SM, disconnect and connect track without causing damage to the track suspension system or injury to personnel.

TRAINING OBJECTIVE: B004

TASK: Remove and replace a track shoe.

CONDITION: At night, acting as a vehicle commander or crew member, given a M2, all necessary tools, and TM 9-2350-252-10.

STANDARD: PL, PSG, MGNR, SL, ASL, GNR, DVR employ the sequence and procedures to remove and replace a track shoe consisting of disconnecting track, removing track shoe, installing track shoe, connecting track in accordance with TM 9-2350-252-10, within 2 hours.

TRAINING OBJECTIVE: B005

TASK: Tow/tow-start a M2 Bradley (SM 071-324-6021).

CONDITION: At night, given a M2 Bradley with basic issue items (BII), a similar operational vehicle with driver and vehicle commander for the towed nonoperational vehicle.

STANDARD: PL, PSG, MGNR, SL, ASL, GNR, DVR within 1 hour, IAW FM 21-2 and TM 9-1005-249-10, tow/tow-start the M2 Bradley without causing damage to equipment or injury to personnel.

TRAINING OBJECTIVE: B006

TASK: Perform before-, during-, and after-operation maintenance on a BIFV turret.

CONDITION: At night, given a BIFV with BII complete, 25mm automatic gun and M240C machinegun installed, DA Forms 2404 and 2408-14, vehicle logbook, and TM 9-2350-252-10-2.

STANDARD: The PL, PSG, MGNR, SL, ASL, GNR, DVR must perform before-, during-, and after-operation checks on the BIFV turret to include locating all faults and correcting or reporting them to organizational maintenance within 2 hours.

TRAINING OBJECTIVE: B007

TASK: Perform operator maintenance and inspect an M16A1 rifle.

CONDITION: At night, given training in accordance with Task No. 071-311-2001, FM 21-2, and the PMCS in TM 9-1005-249-10 w/c 1.

STANDARD: Within 1 hour, PL, PSG, MGNR, SL, ASL will be familiar with the procedure and be required to actually perform operator maintenance upon completion of battlesight zero.

TRAINING OBJECTIVE: B008

TASK: Perform operator maintenance on an M231 firing port weapon (SM 071-311-6001).

CONDITION: At night, given a cleared M231 firing port weapon (FPW), magazine small arms cleaning kit, STP 7-11M2-SM, and TM 9-2350-252-10-2.

STANDARD: PL, PSG, MGNR, SL, ASL within 1 hour, disassemble, inspect, clean, lubricate, and assemble the M231 FWP and have the weapon pass a function check without causing injury to operator or damage to equipment. Defective parts that cannot be corrected by the operator are reported to organizational maintenance personnel.

IVB02

TRAINING OBJECTIVE: B009

TASK: Perform operator maintenance on an M240C machinegun.

CONDITION: At night, given an M2 with an installed M240C machinegun that has been cleared, an M240 machinegun cleaning kit, and TM 9-1005-315-10-2.

STANDARD: PL, PSG, MGNR, SL, ASL, GNR within 1.5 hours, remove, disassemble, inspect, clean, lubricate, assemble, and install the M240C machinegun and pass a functions check without injury to operator or damage to equipment.

TRAINING OBJECTIVE: B010

TASK: Perform operator maintenance on a 25mm automatic gun.

CONDITION: At night, given an M2 with an installed 25mm automatic gun which has been cleared, a 25mm gun cleaning kit, and TM 9-2350-252-10-2.

STANDARD: PL, PSG, MGNR, SL, ASL, GNR within 2 hours, remove, disassemble, inspect, clean, lubricate, assemble, install, and time the 25mm automatic gun so that it functions properly without injury to operator or damage to equipment.

TRAINING OBJECTIVE: B011

TASK: Perform operator maintenance on M257 smoke grenade launcher.

CONDITION: At night, given a BIFV, with the M257 smoke grenade launchers attached, master power off, turret power off, eight dummy smoke grenades, and cleaning equipment.

STANDARD: PL, PSG, MGNR, SL, ASL, GNR within .5 hour, inspect, clean and lubricate the M257 smoke grenade launcher without causing injury to operator or damage to equipment and IAW TM 9-2350-10-2.

ANNEX C: WEAPONS

TRAINING OBJECTIVE: C001

TASK: Disassemble, assemble, and perform a functions check on the M16A1 rifle, and disassemble and assemble the magazine for the M16A1 rifle.

CONDITION: At night, given an M16A1 rifle and magazine.

STANDARD: PL, PSG, MGNR, SL, ASL, GNR, DVR, RATELO, AAS, R/S disassemble the M16A1 rifle within 2 minutes and assemble it within 2 minutes, disassemble the magazine for the M16A1 rifle within 1 minute and assemble it within 1 minute, and perform the functions check without missing any steps in accordance with FM 23-9, Chapter 2, Section II.

TRAINING OBJECTIVE: C002

TASK: Disassemble, assemble, and perform a functions check on the M203 grenade launcher, and identify the four major groups of ammunition for the M203 at night.

CONDITION: At night, given an M203 grenade launcher and dummy ammunition and STP 7-11M1-SM.

STANDARD: PL, PSG, SL, ASL, G disassemble the M203 within 2 minutes and assemble it within 2 minutes, perform the functions check within 1 minute, and identify the four major groups of ammunition in accordance with soldier's manual.

TRAINING OBJECTIVE: C003

TASK: Disassemble and assemble the squad automatic weapon.

CONDITION: At night, given an M249 squad automatic weapon.

STANDARD: PL, PSG, MGNR, SL, ASL, AR without error, disassemble the M249 squad automatic weapon within 4 minutes and assemble the M249 squad automatic weapon within 4 minutes in accordance with TM 9-1005-201-10.

TRAINING OBJECTIVE: C004

TASK: Install and remove the M231 firing port weapon.

CONDITION: At night, given an M2 and a firing port weapon.

STANDARD: All platoon personnel will, within 4 minutes, install and remove the firing port weapon without causing damage to equipment or injury to personnel.

TRAINING OBJECTIVE: C005

TASK: Load/unload and clear the M231 FPW (SM 071-311-6003).

CONDITION: At night, given an M231 firing port weapon (FPW), magazine, 30 rounds of 5.56mm tracer ammunition, and STP 7-11M2-SM.

STANDARD: All platoon personnel will inspect, clean, and load ammunition into the magazine. Load the FPW so that it is ready to fire. Within 2 minutes load, unload, and clear the FPW without damaging equipment or injuring personnel.

TRAINING OBJECTIVE: C006

TASK: Perform misfire procedures on a M231 firing port weapon (SM 071-311-6004).

CONDITION: At night, given a M2 Bradley, a magazine loaded with 5.56mm tracer ammunition, a M231 firing port weapon (FPW) that fails to fire, and STP 7-11M2-SM.

STANDARD: All platoon personnel will within 1 minute perform misfire procedures without damaging equipment or injuring personnel.

TRAINING OBJECTIVE: C007

TASK: Select appropriate 40mm ammunition for the M203 grenade launcher.

CONDITION: At night, given five different rounds of 40mm ammunition to include: HEDP M433; CS M651; Star Parachute M583 (White), M662 (Red), M661 (Green); Star Cluster M585 (White), M663 (Green), M664 (Red); Smoke, Ground Marker, M715 (Green), M716 (Yellow), M713 (Red). Given the requirement to match the correct ammunition for a specific intended use and FM 23-3.

STANDARD: PL, PSG, SL, ASL, G within 5 minutes correctly match the types of ammunition for its intended use as follows:

A. Ammo: HEDP. Use: Against exposed personnel, light armored vehicles, and moderately fortified fighting positions. B. AMMO: CS. Use: To drive the enemy from bunkers or enclosed positions in built-up areas. C. Ammo: Star Parachute. Use: To signal and illuminate. D. Ammo: Star Cluster. Use: To signal only. E. Ammo: Smoke. Use: To mark targets and locations, not for screening.

TRAINING OBJECTIVE: C008

TASK: Load/unload a TOW launcher on a Bradley M2 (SM 071-316-3009).

CONDITION: At night, given a Bradley M2 with basic issue items (BII), TOW launcher in load position, TOW missiles and STP 7-11M1-SM.

STANDARD: PL, PSG, MGNR, SL, ASL, RATELO, AAS, AR, G, R/S within 2 minutes inspect TOW missiles and launcher. Load TOW missiles into launcher so that it is ready to fire. Unload and clear TOW launcher without causing any damage to equipment or personnel.

TRAINING OBJECTIVE: C009

TASK: Remove a misfired TOW missile from a Bradley M2 (SM 071-316-3015).

CONDITION: Given a Bradley M2 with turret at either 1600 mils or 4800 mils, the TOW launcher raised to firing position, all hatches closed, a misfired missile that failed to launch after the gunner applied immediate action, a voice directive to unload a misfired missile in number 1 or number 2 launch tube, a TOW that has been selected, an assistant, and STP 7-11M1-SM.

STANDARD: PL, PSG, MGNR, SL, ASL, RATELO, AAS, AR, G, R/S within 2 minutes remove misfired TOW missile from a fighting vehicle, making sure the missile is kept pointed away from friendly troops so that no equipment is damaged and no personnel are hurt.

IVC03

ANNEX D: GUNNERY

TRAINING OBJECTIVE: D001

TASK: Identify target signature.

CONDITION: In a training area, at night; and using audio/visual aids, given FM 23-9, TC 23-11, STP 7-11M2-SM.

STANDARD: Within .5 hour, CO, PL, PSG, MGNR, SL, ASL, GNR must identify seven out of 10 various signatures that will reveal target location.

TRAINING OBJECTIVE: DC02

TASK: Identify friendly and enemy combat vehicles.

CONDITION: At night, given a simulated combat situation in a mounted or dismounted role with assorted targets at ranges from 300 to 3,000 meters, and STP 7-11M2-SM.

STANDARD: CO, PL, PSG, MGNR, SL, ASL, GNR must identify type of target as friendly or enemy, within 2 minutes.

TRAINING OBJECTIVE: D003

TASK: Identify the characteristics and capabilities of combat vehicles.

CONDITION: At night, given the characteristics and capabilities of NATO and Soviet combat vehicles, given STP 7-11M1-SM, 7-11M2-SM, and FM 23-1.

STANDARD: Entire unit must correctly identify six NATO and six Soviet combat vehicles, and state their general capabilities, within 30 seconds.

TRAINING OBJECTIVE: D004

TASK: Issue a fire command.

CONDITION: At night, given a BIFV stationary or moving at speeds of 15 to 20 miles per hour, simulated targets at ranges of 0 to 3,750 meters and FM 23-1, TM 9-23-50-252-10-2, STP 7-11M1-SM, 7-11M2-SM.

STANDARD: Entire unit will be able to initiate the appropriate fire command within 5 seconds.

TRAINING OBJECTIVE: D005

TASK: Track a moving target.

CONDITION: At night, given a stationary BIFV with master power switch on, handbrake set, the turret and ISU placed into night operation, the turret drive switch on, travel lock engaged, four tracking exercise lines (progressing from easy to difficult) simulating BMP/BRDM targets, and references (FM 23-1, TM 9-2350-250-10-2, STPs 7-11M1(2)-SM).

STANDARD: CO, PL, PSG, MGNR, SL, ASL, GNR, DVR must track each simulated target while keeping the 1-mil reticle circle between the parallel lines. Complete one tracking cycle (top to bottom or bottom to top) within the time standard listed below:

<u>Target Speed (Sim)</u>	<u>Tracking Cycle</u>
5 MPH (8 KPH)	180 seconds
15 MPH (24 KPH)	60 seconds
25 MPH (36 KPH)	40 seconds

TRAINING OBJECTIVE: D006

TASK: Prepare a range card for an M2 Bradley (SM 071-324-2003).

CONDITION: Given an M2 Bradley during daylight hours, a stationary firing position, a sector of fire, and night RPs at 1000m, 2000m, and 3000m.

STANDARD: The CO, PL, PSG, MGNR, SL, ASL, GNR will prepare a range card that includes a sketch section, which is a representative sketch of the terrain, and a data section, sectors of fire, and military symbols.

TRAINING OBJECTIVE: D007

TASK: Engage targets from a stationary BIFV.

CONDITION: At night, given an M2 in a hull defilade position, with BIFV M2 MILES mounted, moving T-71 silhouettes (1,500 to 1,800 meters), stationary or moving BMP, BRDM, or ZSU-23-4 silhouettes (800 to 2,500 meters), and troop silhouettes (600 to 800 meters), and references (FM 23-1, TM 9-2350-252-10-2, STPs 7-11M1(2)-SM).

STANDARD: CO, PL, PSG, MGNR, SL, ASL, GNR obtain a direct hit on a moving tank silhouette with one TOW MILES, launch missile within 15 seconds after target exposure, kill (five rounds on the target) all single stationary targets within 15 seconds using 10 rounds per target, kill all multiple moving and/or stationary targets (BMP, BRDM, and ZSU-23-4).

TRAINING OBJECTIVE: D008

TASK: Engage targets from a moving BIFV.

CONDITION: At night, given a moving BIFV, with BIFV M2 MILES mounted, stationary and/or moving BMP or BRDM silhouettes (600 to 2,000 meters), and troop silhouettes (600 to 800 meters), and references (FM 23-1, TM 9-2350-252-10-2, STPs 7-11M1(2)-SM).

STANDARD: CO, PL, PSG, MGNR, SL, ASL, GNR will kill (two rounds on target) all single stationary targets within 20 seconds using 10 rounds of 25mm MILES ammunition per target. Kill all multiple moving and/or stationary targets (BMP, BRDM, and ZSU-23-4) within 40 seconds using 10 MILES rounds per target, and suppress all troop targets within seconds using 100 rounds of 7.62mm MILES ammunition.

TRAINING OBJECTIVE: D009

TASK: Engage targets with the 25mm automatic gun.

CONDITION: Given a BIFV which is stationary or moving at the speed of 15 to 20 miles per hour, turret power on, turret drive on, ARM-SAFE-RESET switch on safe, 25mm gun MILES and stationary or moving BMP, BRDM, ZSU 23-4 silhouettes at a range of 800 to 2,500 meters, and references (FM 23-1, TM 9-2350-252-10-2, STPs 7-11M1(2)-SM).

STANDARD: CO, PL, PSG, MGNR, SL, ASL, GNR will engage single or multiple staionary or moving lightly armored vehicle silhouettes within 30 seconds from a stationary BIFV.

TRAINING OBJECTIVE: D010

TASK: Use limited visibility firing techniques with an M16A1 rifle (071-311-2006).

CONDITION: As a member of a rifle squad in a defensive position during daylight, given an M16A1 rifle, a magazine and ammunition, sticks or rocks and a board or log available in the area, with instructions on the individual's preplanned sector of fire for use during limited visibility and left and right limits.

STANDARD: PL, PSG, MGNR, SL, ASL, RATELO, AAS, R/S will within 30 minutes emplace and align aiming and firing stakes on identifiable probable enemy avenues of approach, assault positions, and automatic weapons positions. Include left and right limiting stakes (one may be the parapet) indicating the preplanned sector of fire. When the weapon is employed using the stakes, the rounds can be placed on selected target areas/positions or are within the sector of fire (final protective fire [FPF] or fires on sector limits must be grazing fire).

TRAINING OBJECTIVE: D011

TASK: Zero an AN/PVS-4 to an M16A1 rifle (071-315-2307).

CONDITION: During daylight or darkness, given an AN/PVS-4 mounted on a zeroed M16A1 rifle, a magazine with 18 rounds of ammunition, a silhouette target 25 meters from the firing point, and sandbags.

NOTE: Ensure that the AN/PVS-4 has the M16, M203 sight reticle installed.

STANDARD: PL, PSG, MGNR, SL, ASL, RATELO, AAS, R/S will within 1 hour place the center of a three-round shot group 7 centimeters, or five squares, below the target aiming point.

NOTE: The sight may be zeroed during daylight or darkness. If done during daylight, the daylight cover must be used.

CAUTION: Prolonged use of the sight under high light without a daylight cover will damage the image intensifier assembly.

TRAINING OBJECTIVE: D012

TASK: Engage targets with an M16A1 rifle using an AN/PVS-4 (071-315-2308).

CONDITION: During darkness, given an M16A1 rifle with a mounted and zeroed AN/PVS-4, one silhouette target between 50 and 100 meters, one at 150 meters and one between 200 and 250 meters, and one M16A1 magazine with rounds of ammunition.

STANDARD: PL, PSG, MGNR, SL, ASL, RATELO, AAS, R/S will within 5 minutes fire all 18 rounds and hit the targets a minimum of nine times (there must be a minimum of five hits on the 150-meter target and a minimum of two hits each on the 50- to 100-meter target and the 200- to 250-meter target).

TRAINING OBJECTIVE: D013

TASK: Use limited visibility firing techniques with an M203 grenade launcher (071-311-2105).

CONDITION: As a member of a rifle squad in a defensive position during daylight, given an M203 grenade launcher, M203 practice rounds, sticks or rocks and boards or logs available in the area, instructions on the individual's preplanned sectors of fire for use during limited visibility, and left and right limits.

STANDARD: Grenadier will within 30 minutes construct and place out aiming and firing stakes that will cause rounds to hit targets during periods of limited visibility in sector of fire, deadspace, likely avenues of enemy approach, and enemy assault positions.

TRAINING OBJECTIVE: D014

TASK: Zero an AN/PVS-4 to an M203 grenade launcher.

CONDITION: During daylight or darkness on a zero firing range, given a magazine with 18 rounds of 5.56mm ammunition, a silhouette target 25 meters from the firing point, and sandbags.

CAUTION: Prolonged use of the sight under high light without a daylight cover will damage the image intensifier assembly.

STANDARD: Grenadier will, within 60 minutes, zero the AN/PVS-4 to the M203 so that the AN/PVS-4 reticle is aligned on the target aiming point and the center of the shot group is 9.8 centimeters below the target aiming point and 4.2 centimeters to the right.

TRAINING OBJECTIVE: D015

TASK: Engage target with an M203 grenade launcher using an AN/PVS-4 (071-315-2352).

CONDITION: During darkness on an M203 range with a target at 200 meters, given a zeroed M203 with an AN/PVS-4 mounted and three rounds of 40mm ammunition.

STANDARD: Within 3 minutes, Grenadier will, from a prone support position, engage a target at 200 meters and place two out of the three rounds within 5 meters of the target.

TRAINING OBJECTIVE: D016

TASK: Zero an AN/PVS-4 to an M60 machinegun (071-315-2313).

CONDITION: During daylight or darkness, on a firing range with targets at a distance of 25 meters, given a zeroed M60 machinegun with a mounted AN/PVS-4 and 20 rounds of ammunition.

STANDARD: Within 60 minutes, Auto Rifleman will zero the AN/PVS-4 to the M60 machinegun so that when complete the shot group is 11.9 centimeters or 8 1/2 squares directly below the target aiming point.

TRAINING OBJECTIVE: D017

TASK: Engage a target with an M60 machinegun using an AN/PVS-4.

CONDITION: Given a zeroed M60 machinegun with an AN/PVS-4 nightsight mounted, target(s), 7.62mm ammunition, and a sector of responsibility.

STANDARD: Within 5 minutes, Auto Rifleman will acquire and effectively engage the target or targets.

NOTE: The M249 and the AN/PVS-4 are not currently compatible. Developmental efforts will provide a bracket which will allow mounting the AN/PVS-4 on the M249. The following training objectives are provided for future use.

TRAINING OBJECTIVE: D018

TASK: Zero an AN/PVS-4 to a M249 Squad Automatic Weapon (SAW).

CONDITION: During daylight or darkness, on a firing range with targets at a distance of 25 meters, given a zeroed M249 SAW with a mounted AN/PVS-4 and 20 rounds of ammunition.

STANDARD: Within 30 minutes, Auto Rifleman will zero the AN/PVS-4 to the M249 SAW so that when complete the shot group is 11.9 centimeters or 8 1/2 squares directly below the target aiming point.

TRAINING OBJECTIVE: D019

TASK: Engage a target with a M249 Squad Automatic Weapon (SAW) using an AN/PVS-4.

CONDITION: Given a zeroed M249 SAW with an AN/PVS-4 night sight mounted, target(s), 5.56mm ammunition, and a sector of responsibility.

STANDARD: Within 5 minutes, Auto Rifleman will acquire and effectively engage the target or targets.

ANNEX E: TACTICS

NOTE: Leader tasks may be conducted during daylight in garrison to maximize the utilization of time in the night training field location.

TRAINING OBJECTIVE: E001

TASK: As a commander, CO, XO, PL will write paragraphs 2 and 3 of an operation order for an Infantry company night attack.

CONDITION: Given a battalion fragmentary order, a tactical situation, a map, and references (FM 7-10, -20; 100-5).

STANDARD: Within 60 minutes: A. Paragraph 2 must include the who, what, when, where, and why of the operation. B. Paragraph 3 must include a scheme of maneuver based on the factors of METT, a fire support plan which complements the scheme of maneuver, subordinate unit subparagraphs, and coordinating instructions to include a plan for the consolidation and reorganization on the objective and locations of critical control measures.

TRAINING OBJECTIVE: E002

TASK: As a commander, CO, XO, PL will write a company night reconnaissance and surveillance plan.

CONDITION: Use TC 30-28, a reconnaissance and surveillance plan from battalion, and references (FM 7-20; 71-1, -2; 7-7J).

STANDARD: Within 30 minutes, the company night reconnaissance and surveillance plan must be in accordance with the requirements of the battalion reconnaissance and surveillance plan and must support the TF OPSEC, INTELL and operations plans and be IAW TC 30-28, page 31.

TRAINING OBJECTIVE: E003

TASK: CO, XO, PL will determine the key considerations involved in the planning and execution of a company night attack.

CONDITION: Given 30 minutes, use TT 71-2J, TF OPORD, and references (FM 7-7J, -20; 71-1, -2).

STANDARD: The Platoon Leader or Commander must be able to describe orally or in writing the techniques and considerations for the employment of illumination and STANO devices, techniques of command and control, navigation, identification, coordination and use of supporting fires that are peculiar to the conduct of a limited visibility attack, in accordance with TT 71-2J, pages 4-91 through 4-103 and Appendix F.

TRAINING OBJECTIVE: E004

TASK: As a commander; CO, XO, PL will determine a task organization and write paragraph 3 of the TM operations order.

CONDITION: Given 60 minutes, additional information about the enemy, a brigade operations order and the TF commander's guidance using TT 71-2J as a reference.

STANDARD: The task organization must support the scheme of maneuver. Paragraph 3 must address those key considerations for conducting limited visibility operations.

TRAINING OBJECTIVE: E005

TASK: Modify and refine the original plan, based on the changing tactical situation.

CONDITION: Given 15 minutes, a change in the tactical situation, TT 71-2J, and the original OPORD developed previously, while serving as a battalion/TF commander or staff officer.

STANDARD: Platoon Leaders and Commanders will prepare in writing and orally brief a fragmentary order which, when implemented, will offer the greatest chance of successful mission accomplishment.

TRAINING OBJECTIVE: E006

TASK: CO, XO, PL will plan a night defense with a BIFV company.

CONDITION: Acting as a company commander in the field during a TEWT, given 60 minutes, a task force operation order with map and overlays, and references (FM 7-7J; 71-1, -2).

STANDARD: Company Commander will conduct a reconnaissance and develop a commander's estimate. The reconnaissance must include sighting of all major weapon systems, obstacles, indirect fire, and logistics.

TRAINING OBJECTIVE: E007

TASK: CO, XO, PL will plan for the night occupation of a BIFV company defensive battle position.

CONDITION: Given a company OPORD and overlay, acting as a company commander with 30 minutes to complete the task, and references (FM 5-34; 7-10, -20).

STANDARD: The company commander's plan must ensure occupation is complete by the time designated, security is established and maintained throughout, and that proper coordination is effected so that minimum change to the layout will be necessary at first light.

TRAINING OBJECTIVE: E008

TASK: CO, XO, PL will plan a company delay operation.

CONDITION: As a company commander in the field, given a mission statement, general situation, a task organization, and FM 71-2J.

STANDARD: Within 1-1/2 hours, the commander must develop paragraphs 2 and 3 of the company operation order with accompanying overlay. The order must be tactically sound.

TRAINING OBJECTIVE: E009

TASK: CO, XO, PL will prepare a company night withdrawal order.

CONDITION: In a field environment, present an oral operation order, as a commander, given FM 71-2J.

STANDARD: Company Commander must successfully apply sound tactical principles.

TRAINING OBJECTIVE: E010

TASK: CO, XO, PL will compare a night hasty attack and a deliberate night attack on urbanized terrain.

CONDITION: In a field environment, given 30 minutes.

STANDARD: The Company Commander and Platoon Leaders must verbally express that the hasty attack has three common tasks (find a weak point, fix forward enemy elements, and quickly move through or around the weak point)—and that the deliberate attack has three phases (isolate the area, secure a foothold and clear the area). He should also point out that the main differences between a hasty and a deliberate attack at night are the amount of reconnaissance, coordination, and planning time. This explanation will be IAW FM 90-10, page 2-13, and FM 90-10-1, pages 3-5 through 3-8.

TRAINING OBJECTIVE: E011

TASK: CO, XO, PL will complete paragraph 3 of a company operation order.

CONDITION: Given 60 minutes, a tactical situation and mission in a field environment.

STANDARD: Paragraph 3 must contain the concept of operation, subordinate instructions for combat and combat support assets, and coordinating instructions. This paragraph should be based upon the company commander's or platoon leader's analysis of METT and be IAW FM 90-10-1, Chapter 3.

TRAINING OBJECTIVE: E012

TASK: CO, XO, PL will plan a night movement to contact.

CONDITION: At night, given 60 minutes, as the leader of a Bradley M2 platoon that is the lead platoon of a company/company team about to conduct a movement to contact, given an axis of advance, a march objective to seize or bypass, and an enemy situation which is vague.

STANDARD: IAW FM 7-7J, select a route, establish movement control measures and fire control measures, and designate platoon weapons-ready posture.

TRAINING OBJECTIVE: E013

TASK: Acting as a Company Commander; CO, XO, PL will complete paragraph 4 of a company operation order.

CONDITION: Given 30 minutes, a tactical situation and mission in field environment.

STANDARD: Company Commander and Platoon Leaders must insure that paragraph 4 includes instructions for the movement of the company trains, provisions for the evacuation of wounded, handling of POWs, vehicle recovery and refueling, and instructions on meals and ammunition. These instructions should be IAW FM 90-10-1, Chapter 3.

TRAINING OBJECTIVE: E014

TASK: CO, XO, PL will prepare a company operation order for night defense of urbanized terrain.

CONDITION: Given 120 minutes, the commander's decision and concept and the battalion operation order, while acting as a company commander in a field environment.

STANDARD: Company Commander and Platoon Leaders insure that the operation order must be consistent with the tactical doctrine in FM 90-10, Chapter 3, pages 3-13 to 3-42; FM 71-2, Chapter 5, pages 5-16 to 5-32, Appendix B, Appendix F, pages F-1 to F-4, F-8, and F-9; and FM 100-5, Chapter 14, pages 14-15 to 14-27.

TRAINING OBJECTIVE: E015

TASK: CO, XO, PL, PSG will plan for the use of indirect fire, smoke, and illumination.

CONDITION: In a field environment, given 60 minutes, a tactical situation that calls for battlefield obscuration or illumination and FM 60-20, 101-31-1.

STANDARD: The Commander must select the appropriate obscurant or illumination projectile based on the characteristics of the munitions. The placement of the munition must be consistent with the commander's guidance, scheme of maneuver, munition availability and weather.

TRAINING OBJECTIVE: E016

TASK: Identify the different forms of battlefield obscuration.

CONDITION: In the field, FC 21-41, and 15 minutes.

STANDARD: The Company Commander and Platoon Leaders must correctly identify and describe four forms of battlefield obscuration in accordance with FC 21-41, FMs 3-4, -50, -87, -100.

TRAINING OBJECTIVE: E017

TASK: CO, XO, PL will list the advantages and disadvantages of operations during obscured battlefield conditions.

CONDITION: In the field, given 15 minutes, and FC 21-41.

STANDARD: Correctly list at least two advantages and disadvantages of operations during obscured battlefield conditions in accordance with Chapter 6, FC 21-41.

TRAINING OBJECTIVE: E018

TASK: CO, XO, PL will list and define four applications of smoke.

CONDITION: In the field without references, given 30 minutes.

STANDARD: IAW FMs 3-4, -50, -87, -100 the applications should be listed and defined as follows, or words to that effect: A. Obscuring smoke is employed on enemy positions. It degrades the enemy's vision both within and beyond his location. Smoke delivered on an enemy antitank guided missile (ATGM) position may prevent the enemy from seeing or tracking targets, thereby reducing effectiveness. Employment of obscuring smoke on an attacking armored force may cause it to reduce speed, change its direction, deploy prematurely, and/or rely on nonvisual means of command and control. Obscuring smoke may also be employed on forward observers to limit target acquisition capability. B. Screening smoke is employed within areas of friendly operation or in areas

between friendly and enemy forces to degrade enemy ground and aerial observation and fire. C. Deceiving smoke is used to deceive the enemy regarding US intentions. For example, smoke can be employed on several avenues of approach to confuse the enemy as to the actual avenue of the main attack. D. Identifying/signaling smoke is employed to identify targets, supply and evacuation points, and friendly unit positions. It is also used to provide for prearranged battlefield communications.

TRAINING OBJECTIVE: E019

TASK: CO, XO, PL will list and describe three types of screening smoke.

CONDITION: In the field without reference, given 30 minutes.

STANDARD: IAW FMs 3-4, -50, -87, -100 the types of screening smoke should be listed and defined as follows, or words to that effect. A. Smoke blanket is used primarily over friendly areas to screen them from enemy visual observation and hinder enemy aerial observation. The use of a smoke blanket may restrict movement and activity within the screen, thus hampering operations of friendly troops. The smoke blanket is produced by smoke generators. B. A smoke haze is used to hinder aerial and ground observation by concealing the location of friendly units. The smoke haze increases the survivability of friendly forces without reducing visibility of friendly forces to such an extent that the mission cannot be accomplished. It is produced by smoke generators. C. A smoke curtain is a dense vertical development of smoke rather than a horizontal blanket over an area. It is placed between friendly and enemy positions. It is used to obscure or restrict enemy ground observation of friendly positions and activities. It does not prevent enemy aerial observation. Aircraft-mounted smoke systems are best for producing hasty smoke curtains.

TRAINING OBJECTIVE: E020

TASK: CO, XO will describe Soviet/Warsaw Pact smoke doctrine and capabilities.

CONDITION: Given FC 21-41 and 15 minutes.

STANDARD: Identify one Soviet/Warsaw Pact use and source of smoke in accordance with Chapter 6, FC 21-41.

TRAINING OBJECTIVE: E021

TASK: CO, XO will describe Soviet/Warsaw Pact smoke effects on US electro-optical observation/weapon systems.

CONDITION: Given FC 21-41 and 15 minutes.

STANDARD: Correctly describe the effects of Soviet/Warsaw Pact smoke on one US electro-optical observation/weapon system in accordance with Chapter 6, FC 21-41.

TRAINING OBJECTIVE: E022

TASK: CO, XO, PL will plan for the employment and calculate the number of smoke pots required to accomplish a mission.

CONDITION: In the field; given 20 minutes, a mission situation requiring employment of smoke and the charts and nomographs booklet FC 21-46 and FC 21-41.

STANDARD: Calculate the spacing between smoke pot positions, distance from smoke line to the near edge of the area to be smoked, and the total number of smoke pots required to accomplish the mission in accordance with Chapter 6, FC 21-41.

TRAINING OBJECTIVE: E023

TASK: CO, XO, PL, PSG, MGNR, SL, ASL analyze the considerations to be made to conduct an operation during periods of limited visibility.

CONDITION: Given FM 90-10-1 and 15 minutes.

STANDARD: Analysis for offense and defense is to comply with FM 90-10-1, Chapters 3 and 4.

TRAINING OBJECTIVE: E024

TASK: CO, XO, PL will plan fires to support either an offensive or defensive operation.

CONDITION: In a field environment, given 15 minutes, and a tactical situation.

STANDARD: For offensive operations, soldier must plan for fire from the line of departure to the objective, on top of the objective, and beyond the objective. For defensive operations, soldier must plan for fire in front of the position, on top of the position and behind the position. Fires must be planned on all known, suspected, and likely enemy locations that influence the unit's area of operation. Fires must be planned on prominent terrain features through the battle area. Fires must be planned without regard to weapon capabilities or unit boundaries in accordance with FC 7-170, Chapter 4.

TRAINING OBJECTIVE: E025

TASK: CO, XO, PL, PSG, MGNR, SL will determine direction using celestial bodies.

CONDITION: In a field environment, given five situations and a pencil.

STANDARD: Within 10 minutes, determine the correct direction in four of the five situations, and IAW FM 5-36.

TRAINING OBJECTIVE: E026

TASK: All unit personnel will navigate from one position on the ground to another point.

CONDITION: Given FM 21-26, a standard 1:50,000 scale military map, compass, a coordinate scale and protractor, and designated start and finish points no more than 3,000 meters apart. The field location of the task should appear on the military map and contain varying types of terrain. Weather conditions should not be considered a limiting factor.

STANDARD: Within 2 hours, move from the start point to the finish point.

TRAINING OBJECTIVE: E027

TASK: All unit personnel will determine distance while moving between two points on the ground.

CONDITION: Given FM 21-26, a 600-meter pace course, a pace factor conversion table to determine your pace count, and a requirement to move by foot over varying types of terrain during night hours in all types of weather from a start point to a finish point not less than 500 meters nor greater than 700 meters in length.

STANDARD: Determine the distance between the start point and finish point to within 5 percent of the actual distance in a maximum of 90 minutes.

TRAINING OBJECTIVE: E028

TASK: All unit personnel will navigate from one point on the ground to another, utilizing dead reckoning.

CONDITION: Given FM 21-26, using the technique of dead reckoning, in the field, dismounted, during the hours of darkness, over hilly and wooded terrain, in wet or dry weather, given a compass and a requirement sheet which provides the azimuths and distances of two position stakes that are a maximum distance of 1,500 meters from each other, on a self-correcting course.

STANDARD: Identify two out of two position stakes, with an error tolerance of one position stake to either the left or the right of the correct position stake (the position stakes are separated by approximately 125 meters), within 180 minutes or less.

TRAINING OBJECTIVE: E029

TASK: Identify/operate turret controls and indicators.

CONDITION: Given TM 9-2350-252-10-2, a BIFV with master power on, turret power and turret driver off, turret in power mode, and M240 machinegun and 25mm automatic gun installed.

STANDARD: Within .5 minute; CO, XO, PL, PSG, MGNR, SL, ASL, GNR will be able to identify and operate turret components, controls, and indicators so that he can place the turret into operation during limited visibility using the turret power source.

TRAINING OBJECTIVE: E030

TASK: Identify the controls and indicators on the integrated sight unit.

CONDITION: Per TM 9-2350-252-10-2, Given a BIFV with master power on, turret power and drive switches off, turret in power mode, and M240 machinegun and 25mm automatic gun installed.

STANDARD: Within 2 minutes; CO, XO, PL, PSG, MGNR, SL, ASL, GNR must be able to identify and explain the functions of the controls and indicators associated with the integrated sight unit.

TRAINING OBJECTIVE: E031

TASK: Operate turret in the power mode.

CONDITION: Given TM 9-2350-252-10-2, a BIFV with master power on, turret power and turret drive switches off, and driver and cargo hatches closed.

STANDARD: Within 30 seconds; CO, XO, PL, PSG, MGNR, SL, ASL, GNR must be able to place the turret into power mode operation and control operation from both the gunner and track commander positions.

TRAINING OBJECTIVE: E032

TASK: Operate the turret in the manual mode.

CONDITION: Given TM 9-2350-252-10-2, a BIFV with master power on, turret power and drive switches off, and driver and cargo hatches closed.

STANDARD: Within 20 seconds; CO, XO, PL, PSG, SL, ASL, GNR must be able to place the turret into manual operation and control operation from the gunner position.

TRAINING OBJECTIVE: E033

TASK: Operate the turret using the back-up mode.

CONDITION: Given TM 9-2350-252-10-2, a BIFV with master power on, turret power and drive switches off, and driver and cargo hatches closed.

STANDARD: Within 20 seconds; CO, XO, PL, PSG, SL, ASL, GNR must be able to place the turret into back-up mode operation and control operation from the gunner position.

TRAINING OBJECTIVE: E034

TASK: Operate the integrated sight unit.

CONDITION: Within 10 seconds, given TM 9-2350-252-10-2, a BIFV with master power, turret power, and turret drive switches on, turret in power mode, track commander and gunner hatches closed, and ballistic sight doors closed.

STANDARD: CO, XO, PL, PSG, SL, ASL, GNR must be able to operate the integrated sight unit in the night mode.

TRAINING OBJECTIVE: E035

TASK: Operate the integrated sight unit in the thermal mode.

CONDITION: Per TM 9-2350-252-10-2, given a BIFV with ISU installed and targets arrayed from 300 to 3,750 meters.

STANDARD: CO, XO, PL, PSG, SL, ASL, GNR must place thermal sight into operation and acquire four or five targets within 20 seconds of target exposure.

TRAINING OBJECTIVE: E036

TASK: Each soldier acting as a member of a squad will assist in combat loading a M2 BFV.

CONDITION: At night, given 10 minutes, a Bradley M2, a vehicle squad, a loading plan, and equipment authorized to be loaded into the vehicle.

STANDARD: PL, PSG, MGNR, SL, ASL will inspect all items to be loaded for accountability and serviceability. Correctly stow ammunition, weapons, missiles and equipment in accordance with the loading plan designated in TM 9-2350-252-10-1 Appendix E and stowage guide, or local SOP, to include:

1. Driver's compartment.
2. Engine compartment.
3. Troop compartment.
4. Turret.
5. Vehicle exterior.

TRAINING OBJECTIVE: E037

TASK: Start/stop the engine on a M2.

CONDITION: Given TM 9-2350-252-10-1, an M2 with master power and fuel control handle off, handbrake set, and range selector in neutral (N).

STANDARD: Within 2 minutes; PL, PSG, MGNR, SL, ASL, DVR will start and stop the engine of the M2 without damaging equipment or injuring personnel.

TRAINING OBJECTIVE: E038

TASK: Shut down a Bradley M2.

CONDITION: Given TM 9-2350-252-10-1, an M2 with the engine stopped and one assistant.

STANDARD: Within 15 seconds; PL, PSG, MGNR, SL, ASL, DVR will set fire suppression system on automatic, turn fuel valve off, and secure firing ports, ramp door, and hatches.

TRAINING OBJECTIVE: E039

TASK: Start a M2 Bradley engine using auxiliary power (SM 071-324-6025).

CONDITION: Given 10 minutes, a Bradley vehicle M2, with discharged batteries, a slave cable, and another vehicle with 24-volt system.

STANDARD: IAW STP 7-11M1-SM; XO, PL, PSG, MGNR, SL, ASL, DVR will start the engine of the Bradley, which has discharged batteries, using a slave cable and another vehicle without damage to equipment or injury to personnel.

TRAINING OBJECTIVE: E040

TASK: Tow/tow-start an M2.

CONDITION: Given TM 9-2350-252-10-1, 20 minutes, a nonoperational M2 with BII, a similar operational vehicle with driver and vehicle commander, and a track commander for the towed vehicle.

STANDARD: XO, PL, PSG, MGNR, SL, ASL, DVR will tow and tow start the M2 without causing damage to equipment or injury to soldiers.

TRAINING OBJECTIVE: E041

TASK: Use visual signals to control mounted and dismounted movements.

CONDITION: In a field environment, at night, given FM 21-17 and a requirement to move dismounted and mounted using visual signals.

STANDARD: Within 1 minute, all unit personnel will demonstrate the correct procedure for each visual signal given.

TRAINING OBJECTIVE: E042

TASK: Drive a Bradley M2 at night.

CONDITION: At night, given a .5-1km course, and 5 minutes, an operational M2 with BII; before-operation preventive maintenance checks and services (PMCS) completed; engine running, handbrake set, and throttle handle pushed in; operational armored vehicle crewman (AVC) helmet for the driver and the track commander; and references (TM 9-2350-252-10-1, STP 7-11M1-SM).

STANDARD: Negotiate varied terrain and terrain obstacles safely and without injury to occupants or damage to the vehicle.

TRAINING OBJECTIVE: E043

TASK: All unit personnel will operate a Bradley M2 in the water (SM 071-324-6019).

CONDITION: Given STP 7-11M1-SM, 20 minutes for preparation and predip, a 300m course, 15 minutes swim time, a Bradley M2 with basic issue items (BII), a squad/crew, and a water obstacle.

STANDARD: Prepare the M2 for swim operations, swim the water obstacle with the Bradley M2 without causing damage to equipment or injury to personnel.

TRAINING OBJECTIVE: E044

TASK: Drive a M2 Bradley using night vision equipment (SM 071-324-6033).

CONDITION: Given STP 7-11M1-SM, an operational M2 Bradley with basic issue item (BII), during darkness, AN/VVS-2 night vision viewer, vehicle blackout drive and blackout markers operational, AN/PVS-5 night vision goggles, operational armored vehicle crewman (AVC) helmet, a 5km course, and 45 minutes.

STANDARD: CO, XO, PL, PSG, SL, ASL, DVR will drive the M2 Bradley using night vision device without causing damage to equipment or injury to personnel.

TRAINING OBJECTIVE: E045

TASK: Drive in a convoy at night.

CONDITION: Given FMs 21-7 and 21-306, a M2 BFV in a training environment suitable for conducting a mounted night road march over a 1.5km road distance, and 120 minutes.

STANDARD: CO, XO, PL, PSG, SL, ASL, DVR will perform all basic driving techniques and comply with the following:

1. Order of movement.
2. Convoy speed.
3. Catch up speed.
4. Interval.
5. Emergency procedures.

TRAINING OBJECTIVE: E046

TASK: CO, XO, PL, PSG, SL, ASL, DVR will drive the BFV in various tactical formations at night.

CONDITION: In a field environment, at night, acting as a BFV driver, given the requirement to move as part of a platoon formation. (Each will drive the vehicle for NLT 50 minutes, for a total of all drivers of 6 hours.)

STANDARD: IAW FM 7-7J, -8, STP 7-11M34-SM, on command execute movement to proper formation without damage to equipment or personnel.

TRAINING OBJECTIVE: E047

TASK: Conduct a night movement to contact.

CONDITION: As the leader of a Bradley M2 squad, at night, given an axis of advance, moving mounted in various tactical situations under night conditions. Given a BIFV in a hull defilade position, with all organic weapons MILES systems installed.

STANDARD: IAW FM 7-7J, -8; STP 7-11M34-SM; CO, XO, PL, PSG, SL, ASL, DVR will obtain a direct hit on moving tank with one TOW MILES per target, launch missile within 15 seconds after target exposure, kill (five rounds on target) all single stationary targets within 20 seconds using 10 rounds of 25mm MILES per target, kill all multiple stationary and/or moving BMP targets within 10 seconds using 10 rounds of 25mm MILES per target, suppress (90 percent of rounds hit or impact within 1 meter of target) all troop targets within 20 seconds using 100 rounds of 7.62mm coax MILES and suppress all RPG-7 silhouettes within 20 seconds using 120 rounds of 5.56mm MILES.

TRAINING OBJECTIVE: E048

TASK: CO, XO, PL, PSG, SL, ASL, DVR will implement security formations while mounted and identify defensive positions.

CONDITION: In a field environment, at night, acting as a driver and given the requirement to conduct mounted movement.

STANDARD: IAW FM 7-7J, -8, STP 7-11M34-SM and on visual command, move the BFV into security formations and identify defensive positions within 5 minutes.

TRAINING OBJECTIVE: E049

TASK: Select temporary battlefield postions at night.

CONDITION: During darkness; at an overwatch position; after initial movement into tentative defensive positions; at a halt during movement; or upon receiving direct fire; given STP 7-11M34-SM and 2 minutes.

STANDARD: CO, XO, PL, PSG, SL, ASL, DVR will: A. Select and occupy a firing position which allows good observation, fields of fire, and provides (in order of priority): (1) cover and concealment, or (2) cover only, or (3) concealment only. B. Remain as low as possible (prone where possible) and look (aim) around rather than over objects.

TRAINING OBJECTIVE: E050

TASK: Prepare a Bradley M2 squad defensive position at night.

CONDITION: As a squad leader, at night, given STP 7-11M34-SM, 10 minutes, a requirement to occupy a specified area within the platoon and cover a specified sector with fire. The positions of the key weapons (M2 organic weapons, NED-ATGM and M60 machinegun) have been designated by the platoon leader.

STANDARD: PL, PSG, MGNR, SL, ASL will emplace positions so that all are mutually supporting, utilize cover and concealment, and establish fields of fire for each weapon and tie-in with adjacent squads.

TRAINING OBJECTIVE: E051

TASK: Insure operational security of a Bradley M2 squad at night.

CONDITION: As a leader of a Bradley M2 squad in a field environment, at night operating as part of a larger unit against an opposing force, given STP 7-11M34-SM.

STANDARD: PL, PSG, MGNR, SL, ASL, will insure squad and Bradley M2 are camouflaged and concealed, provide for physical security, enforce noise and light discipline and communications security, and provide for security while traveling mounted.

TRAINING OBJECTIVE: E052

TASK: Insure operational security of a Bradley M2 platoon.

CONDITION: As a Bradley M2 platoon leader, at night, in a field environment, operating as part of a larger unit against an opposing force.

STANDARD: CO, XO, PL, PSG, MGNR, SL will insure squads are following OPSEC procedures by providing security, conducting silent watch, and employing communications security, IAW STP 7-11M34-SM.

TRAINING OBJECTIVE: E053

TASK: Prepare a Bradley M2 platoon night defensive position.

CONDITION: At night, as the leader of a Bradley M2 platoon preparing to defend as part of a larger force, given a platoon sector of responsibility.

STANDARD: IAW STP 7-11M34-SM, CO, XO, PL, PSG, MGNR, SL will use cover and concealment, position key weapons to cover all avenues of approach into platoon sector.

TRAINING OBJECTIVE: E054

TASK: Direct Bradley M2 platoon night defensive fires.

CONDITION: As the leader of a Bradley M2 platoon defending against an attacking enemy force at night.

STANDARD: IAW STP 7-11M34-SM; CO, XO, PL, PSG, MGNR, SL will engage with longest range weapons first. Engage targets with the proper weapons systems and establish control of fires, indirect and direct.

TRAINING OBJECTIVE: E055

TASK: Employ an M2 on night battle positions.

CONDITION: As the leader of a Bradley M2 platoon, at night, operating as part of a company team conducting a defense, given a company defense order that includes commander's concept, mission, and platoon sector of fire.

STANDARD: IAW STP 7-011M34-SM, CO, XO, PL, PSG, MGNR, SL will position fighting vehicle teams and dismount teams to optimize the platoon's total combat power. Establish and maintain control of the platoon. Assign sectors of fire for the entire platoon and for each element, squad, and team, as appropriate.

TRAINING OBJECTIVE: E056

TASK: Load/unload 25mm ready boxes.

CONDITION: At night, within 15 minutes, given an M2 with 230 rounds of HEI-T (inert) and 70 rounds of APDS-T (inert) ammunition and a gunner in the turret to assist in loading the ready boxes.

STANDARD: IAW TM 9-2350-10-2, PL, PSG, MGNR, SL, ASL, RATELO, AAL, AR, G, R/S will identify, inspect, clean, and load the HEI-T and APDS-T ammunition into the ready boxes so that the ammunition can be fed into the feed chutes without ending. Set ammunition switches to match type of ammunition loaded. Unload the ready boxes without causing damage to equipment or injury to personnel.

TRAINING OBJECTIVE: E057

TASK: Enforce noise, light and litter discipline.

CONDITION: As the leader of a unit conducting any tactical mission during the hours of darkness.

STANDARD: IAW STP 7-11M34-SM, PL, PSG, MGNR, SL, ASL will insure that: A. Noise is kept to a minimum. B. No light is visible to the enemy. C. The area is free of litter and other evidence.

TRAINING OBJECT 'E: E058

TASK: Establish a night listening/observation post.

CONDITION: At night, as a squad leader or platoon sergeant in a defensive position, given a squad or platoon, assigned TO&E equipment, a TA-312/PT (or TA-1/PT) and/or a radio, and a requirement to establish an observation point to observe a designated area or probable avenue of approach forward of or on the flanks of your squad or platoon.

STANDARD: IAW STP 7-11M34-SM; PL, PSG, MGNR, SL, ASL; upon moving into the assigned defensive position, select and emplace a two-man postion which: A. Is within effective small arms range of the squad/platoon. B. Allows detection of enemy activity within the designated area or avenue of approach before it would be detectable from the defensive positions and before the enemy could detect the defensive area. C. Has a means of communication (wire or radio) with the platoon leader (may be through squad leader).

TRAINING OBJECTIVE: E059

TASK: Emplace an electronic anti-intrusion device (platoon early warning system--PEWS).

CONDITION: Given 15 minutes, the setting of a platoon in the defense, and TRS-2 (PEWS) complete with nine sensors, and the need to supplement the unit's security plan, and references (FM 7-7J, STP 7-11M34-SM, TM 11-5895-1047-10).

STANDARD: PL, PSG, SL, ASL will emplace the PEWS and insure that: A. Each of the nine sensors are ground implanted. B. The sensors are correctly placed along the most probable mounted or dismounted avenues of approach into the platoon sector. C. The system is properly activated for reception in either the wire or radio mode. D. The system is properly camouflaged so that it cannot be detected by an enemy force. IAW FM 7-7, page 3-7.

TRAINING OBJECTIVE: E060

TASK: Plan for and emplace obstacles.

CONDITION: At night, as the platoon leader of a mechanized infantry platoon operating as a part of a larger force during the conduct of a defensive operation, given a team commander directive to, at a minimum, plan for and, if given the time, materials, and personnel, employ obstacles to supplement the platoon position.

STANDARD: Obstacle/barrier must be emplaced by PL, PSG, SL, ASL IAW the following considerations given the aforementioned conditions. A. Augmentation to the platoon defensive fire plan. B. Obstacles planned for and sited along principal mounted and dismounted avenues of approach, as appropriate, into the platoon sector. C. Platoon plan to include wire (supplementary, tactical, and protective), hasty protective minefield, stump and post obstacles, abatis, log cribs, tank ditches/walls, etc., as appropriate. IAW FM 7-7, Appendix M.

TRAINING OBJECTIVE: E061

TASK: Install a hasty protective minefield at night.

CONDITION: In darkness, given platoon leader's mission directive, platoon personnel with TO&E tools and equipment, lensatic compass, necessary mines and material, and DA Form 1355-1 (Hasty Protective Minefield Record). You have been placed into a situation in which a minefield is to be used to supplement a defensive position. Engineer assistance is not available or needed. You will use the allocated antitank mines (M21 inert) and antipersonnel mines (M16A1 inert) from the company basic load.

STANDARD: PL, PSG, SL, ASL will assist the platoon leader or, as an acting platoon leader accomplish the following in order: A. Report intention to lay a hasty protective minefield and obtain authorization to lay. B. Make a reconnaissance. Determine the best locations for mines based on likely enemy avenues of approach and your platoon's ability to keep the mines under

observation. C. Report initiation of the minefield. D. Emplace the mines on the avenues of approach. Do not arm the mines at this time. (1) Use only metallic mines. (2) Don't use boobytrap devices. E. Record the minefield on DA Form 1355-1-R. F. Arm the mines, working from the enemy side to the friendly side. G. Report completion of the minefield.

TRAINING OBJECTIVE: E062

TASK: Plan the night withdrawal of a BIFV infantry platoon.

CONDITION: In the field, at night acting as a BIFV infantry platoon leader, given instruction on M2 infantry withdrawal operations, a map, a company operation order, FM 7-7, and FM 71-1.

STANDARD: PL, PSG, MGNR will plan for the withdrawal of an infantry platoon utilizing information from instruction, map, operation order, and FM. Plan will include withdrawal not under enemy pressure and disengagement and withdrawal under enemy pressure in accordance with FM 7-7J, Chapter 5.

TRAINING OBJECTIVE: E063

TASK: Conduct night passage of lines.

CONDITION: As the platoon leader of a BIFV infantry platoon conducting either a forward or rearward passage of friendly lines at night during the conduct of an offensive or defensive operation while acting as the team commander's representative.

STANDARD: PL, PSG, MGNR passage of friendly lines will be properly coordinated and executed IAW the following consideration: A. The disposition of the stationary friendly force. B. Contact points. C. Passage lanes. D. Attack position for forward passage or assembly areas. E. Initial location of combat support and service support elements. F. Time of transfer of area responsibility. G. Communications. H. Supporting fires. I. Use of guides during the execution of the passage. IAW FM 71-1, pages L-1 and L-2.

TRAINING OBJECTIVE: E064

TASK: Conduct night surveillance without the aid of electronic devices.

CONDITION: At night with good visibility to 500 meters or beyond, given an unspecified number of moving and stationary OPFOR soldiers skylined at not more than 300 meters; and moving and stationary OPFOR soldiers in open/semi-open areas, not on the skyline at ranges less than 100 meters; and given sounds of wheeled/tracked vehicle movement and sounds of friendly and enemy weapons fire.

STANDARD: IAW STP 7-11M1-SM all platoon personnel will locate 75 percent of soldiers on skyline, locate 50 percent of all soldiers not skylined, differentiate between tracked and wheeled vehicle sounds, and identify all weapons fire as heavy machinegun fire, light machinegun/assault rifle fire, indirect fire, and rocket/recoilless rifle fire.

TRAINING OBJECTIVE: E065

TASK: Conduct night surveillance using an AN/PVS-4.

CONDITION: At night, given TM 11-5855-213-10, an operational AN/PVS-4 in your defensive position, five BA-1100 batteries, and one enemy squad moving within your assigned sector.

STANDARD: IAW STP 7-11M1-SM, all platoon personnel will detect and report all movement within your sector of observation in open areas out to 300 meters.

TRAINING OBJECTIVE: E066

TASK: Emplace/recover pyrotechnic early warning devices at night.

CONDITION: A. Situation 1: Given an M49A1 trip flare (either live or inert) and a designated area for employment of an early warning device. B. Situation 2: Given WD-1/TT field wire or string, an M3 pull release training device (either live or inert), nonelectric blasting cap, crimpers, and a designated area for employment of an early warning device.

STANDARD: All platoon personnel will insure that when: A. Installing devices: (1) Install trip flare (M49A1) or M3 firing device so that the devices are firmly attached in place across designated area. (2) Arm devices so that anyone moving the trip wire/string will make the device go off. B. Removing devices: (1) Remove trip flare by first inserting the safety pin and then reversing installation procedures. (2) the M3 (live) is dangerous to disarm. It should be blown in place. If the device must be disarmed, proceed as outlined in the performance measures.

TRAINING OBJECTIVE: E067

TASK: Recover electronic anti-intrusion devices at night.

CONDITION: Given FM 5-25, -34; 20-32; TM 9-1345-203-12 and P, a platoon early warning system (PEWS) detector unit (in storage), an emplacement of the PEWS, a detection range setting, and a PEWS receiver and receiver operator in the area of emplacement.

STANDARD: IAW STP 7-11M2-SM; all platoon personnel will, within 10 minutes, recover the PEWS and return to storage configuration IAW the performance measure for recovery.

TRAINING OBJECTIVE: E068

TASK: Mount and dismount a Bradley M2, as a member of a dismount team.

CONDITION: At night, given TM 11-5895-1047-10, a M2 Bradley, M16A1 rifle, in a field environment with a designated position in the BFV other than assistant squad leader.

STANDARD: IAW STP 7-11M2-SM, all platoon dismount personnel will dismount left or right on orders from the squad leader or assistant squad leader, maintain position within the dismount team.

TRAINING OBJECTIVE: E069

TASK: Move as a member of a dismount team (SM 071-326-5921).

CONDITION: At night, given a designated position (other than team leader) in a moving dismount team wedge formation, in any climate or terrain at night.

STANDARD: IAW FM 7-7J, all platoon dismount personnel will maintain the same position within the wedge and react immediately to the fire team leader's moves by doing as he does.

TRAINING OBJECTIVE: E070

TASK: Prepare and orally issue a warning order for a night patrol.

CONDITION: As a patrol leader, given a mission briefing and ranger handbook.

STANDARD: PL, PSG, SL, ASL will accomplish task IAW Chapter 5, Section 1, FM 7-8.

TRAINING OBJECTIVE: E071

TASK: Conduct coordination for a night patrol mission.

CONDITION: As a patrol leader, given a mission briefing.

STANDARD: PL, PSG, SL, ASL will accomplish task IAW Chapter 5, Section 1, FM 7-8.

TRAINING OBJECTIVE: E072

TASK: Prepare and orally issue an operation order for a night patrol.

CONDITION: As a patrol leader, given a mission briefing, a ranger handbook, and TO&E rifle platoon with equipment.

STANDARD: PL, PSG, SL, ASL will perform IAW Chapter 5, Section 1, FM 7-8.

TRAINING OBJECTIVE: E073

TASK: Conduct a night departure through forward lines (departure through FF).

CONDITION: As a patrol leader, at night, given a ranger handbook, a friendly unit in the defense with a deliberate barrier.

STANDARD: PL, PSG, SL, ASL will perform IAW Chapter, Section 2, FM 7-8.

TRAINING OBJECTIVE: E074

TASK: Tactically control a patrol's movement.

CONDITION: As a patrol leader, at night, in varying and insecure terrain, given a likelihood of enemy contact.

STANDARD: PL, PSG, SL, ASL will perform IAW Chapter 5, Section 2, FM 7-8.

TRAINING OBJECTIVE: E075

TASK: Lead a night patrol in the execution of immediate action drills.

CONDITION: As a patrol leader, at night, in a near ambush, aerial or artillery attack, or chance contact.

STANDARD: PL, PSG, SL, ASL will perform IAW Chapter 5, Section 2, FM 7-8.

TRAINING OBJECTIVE: E076

TASK: Cross a danger area at night.

CONDITION: As a patrol leader, at night, given a linear area, a small open area, and a large open area to negotiate.

STANDARD: PL, PSG, SL, ASL will perform IAW Chapter 5, Section 2, FM 7-8.

TRAINING OBJECTIVE: E077

TASK: Plan for and occupy a patrol base at night.

CONDITION: As a patrol leader, at night, given the mission to establish a patrol base and a ranger handbook.

STANDARD: PL, PSG, SL, ASL will perform IAW Chapter 5, Section 5, FM 7-8.

TRAINING OBJECTIVE: E078

TASK: Lead a patrol through actions at the objective (Recon).

CONDITION: As a patrol leader, at night, given a combat patrol mission, a TO&E platoon with equipment, an enemy objective, and a ranger handbook.

STANDARD: PL, PSG, SL, ASL will perform IAW Chapter 5, Section 4, FM 7-8.

TRAINING OBJECTIVE: E079

TASK: Conduct reconnaissance and surveillance patrolling.

CONDITION: As a squad or platoon leader of a mechanized infantry unit (dismounted), during period of limited visibility, during the conduct of the defense (hasty or deliberate). Given a specified area and time.

STANDARD: PL, PSG, SL, ASL will plan and conduct reconnaissance and surveillance patrolling well enough to: A. Organize the element into the command, reconnaissance, and security areas of responsibility necessary to accomplish the mission. B. Employ one of the three techniques of reconnaissance (fan, box, or successive sectors). C. Obtain and report information about the terrain and/or enemy within the specified area in order to enhance the security of the squad/platoon position. D. Infiltrate and exfiltrate the target area without being detected by the enemy. IAW FM 7-7, pages 6-1 through 6-8; STP 7-11M4-SM, pages 2-VII-B-6.1 through 2-VII-B-6.6.

TRAINING OBJECTIVE: E080

TASK: React to flares.

CONDITION: At night, upon hearing a flare rising or when suddenly illuminated by a ground or overhead flare.

STANDARD: IAW FM 21-48, 3-5, 21-40, entire unit will react to each situation as follows: A. Ground flares: Move out of the illuminated area, and regroup, reorient yourself, and continue with mission. B. Overhead flare with warning: Assume a prone position (behind concealment when available) before the flare burst. C. Overhead flare without warning: Get into the prone position, making maximum use of nearby cover, concealment, and shadows until the flare burns out. Close one eye to protect your night vision; observe with the other eye. D. Ground or overhead flare while under direct enemy fire or followed by direct enemy fire; use fire and maneuver as you would during daylight.

TRAINING OBJECTIVE: E081

TASK: Implement mission-oriented protective posture (MOPP) at night.

CONDITION: As an infantry platoon leader/sergeant or squad leader, at night, in the field, during the conduct of the defense, given the commander's guidance for MOPP-1 level and the necessary TO&E chemical protective clothing and equipment.

STANDARD: PL, PSG, SL, ASL will insure that MOPP will be implemented for a period of not less than 6 hours and will be adjusted for heat stress or fatigue as necessary. IAW FM 21-40, pages 8-4 through 8-7.

TRAINING OBJECTIVE: E082

TASK: Apply the seven decontamination techniques at night.

CONDITION: In a field environment, at night, given instruction and a demonstration of each technique and FM 3-5.

STANDARD: Entire unit must be able to identify and perform the decontamination techniques in accordance with pages 20 through 26, FM 3-5.

TRAINING OBJECTIVE: E083

TASK: Perform survival decontamination at night.

CONDITION: In a field environment, at night, given an M58A1 training kit and FM 3-5.

STANDARD: Unit will adequately remove liquid contaminant from skin using the kit in accordance with pages 20 through 26, FM 3-5.

TRAINING OBJECTIVE: E084

TASK: The soldier will become familiar with and apply the safety precautions pertaining to NBC equipment and NBC training, as specified by the trainer.

CONDITION: In a field environment, at night, given specific safety precautions and FM 21-48.

STANDARD: CO, XO, PL, PSG, MGNR, SL, ASL will adhere to all safety precautions as given by the instructor in accordance with FM 21-48.

TRAINING OBJECTIVE: E085

TASK: Conduct a reentry through a friendly unit (reenter FFU).

CONDITION: As a patrol leader, at night, given a friendly unit occupying a defense and deliberate barrier and a ranger handbook.

STANDARD: CO, XO, PL, PSG, MGNR, SL, ASL will perform IAW Chapter 5, Section 2, FM 7-8, and Chapter 4, ST 21-75-2.

TRAINING OBJECTIVE: E086

TASK: Conduct chemical decontamination at night.

CONDITION: As the mechanized infantry platoon leader/sergeant or squad leader, at night, in a field environment, having been exposed to chemical or radiological contamination, and given a decontamination detachment and individual/equipment decontamination materials as appropriate.

STANDARD: CO, XO, PL, PSG, MGNR, SL, ASL will insure that the element will decontaminate personnel and equipment using individual decontamination kits, the ABC-M11, and/or the M12 system provided by the decontamination detachment. IAW STP 7-11B1/2-SM pages 2-I-B-5.1 through 2-I-B-5.3, 2-I-B-6-1 and 2-I-B-6.2, and 2-I-B-15.1 through 2-I-B-15.3; STP 7-11M3-SM, pages S-I-B-19.1 through 2-I-B-19.3; and STP 7-11M4; SM, pages 2-I-B-32.1 through 2-I-B-32.3.

TRAINING OBJECTIVE: E087

TASK: Consolidate and reorganize Bradley M2 platoon following contact.

CONDITION: At night, as the leader of a Bradley M2 platoon that is attacking or defending a position. Your platoon has just repelled an enemy assault (defense) or has just seized an objective (offense).

STANDARD: IAW FM 7-7J, CO, XO, PL, PSG, MGNR, SL, ASL will reestablish local security and man the potent weapons first. Reestablish chain of command. Redistribute or resupply ammunition and weapons. Reorganize platoon to compensate for personnel/vehicle losses. Consolidate position using terrain or clock method. Prepare to continue the attack. Replace obstacles and camouflage. Restore communications. Supervise evacuation of dead or seriously wounded.

TRAINING OBJECTIVE: E088

TASK: React to enemy antiarmor fire at night.

CONDITION: At night, as the track commander of a Bradley M2 moving to contact and being fired on by an enemy antitank guided missile, given FM 7-7J.

STANDARD: IAW STP 7-1134-SM, CO, XO, PL, PSG, MGNR, SL, ASL will return fire. If the return fire does not suppress the enemy, fire smoke grenades. Direct driver to move evasively at top speed to a covered position.

TRAINING OBJECTIVE: E089

TASK: React to direct fire while mounted.

CONDITION: At night, as the track commander of the lead squad of a Bradley M2 platoon conducting a mounted movement to contact, upon receiving direct fire from an enemy position given FM 78-7J.

STANDARD: IAW FM 7-7J, CO, XO, PL, PSG, MGNR, SL, ASL will return fire immediately, direct driver to move to the nearest covered position, report the contact to your platoon leader, and follow his instructions.

TRAINING OBJECTIVE: E090

TASK: Conduct a withdrawal/disengagement under enemy pressure.

CONDITION: At night, as a platoon leader of a mechanized infantry platoon as part of a larger force which is withdrawing while the enemy is attacking or is expected to attack.

STANDARD: CO, XO, PL, PSG, MGNR, SL, ASL will insure that the platoon must, at a minimum, accomplish the following: A. Select as well covered and concealed disengagement routes as possible. B. At least a map reconnaissance (preferably an on-the-ground leaders' reconnaissance) of disengagement routes, assembly areas, and follow-on battle positions. C. Use all available fire to stop or slow the enemy's advance in order to maneuver away from the enemy. D. Make maximum use of art fires, smoke, indirect fire, and crew-served weapons to cover the withdrawal. E. Make maximum use of bounding overwatch in "reverse." F. Maximize positioning of infantry and carriers such that rapid mounting and subsequent maneuver is made possible. IAW FM 7-7, pages 5-47 through 5-56.

TRAINING OBJECTIVE: E091

TASK: Conduct a withdrawal/disengagement not under enemy pressure at night.

CONDITION: At night, as the platoon leader of a mechanized infantry platoon as part of a larger force which is withdrawing by stealth before the enemy can react.

STANDARD: CO, XO, PSG, MGNR, SL, ASL will insure that the platoon must, as a minimum, accomplish the following: A. Perform at least a map reconnaissance (preferably an on-the-ground leaders' reconnaissance) of disengagement routes and assembly areas. B. Select as well covered and concealed disengagement routes as possible (disengagement not under enemy pressure should be conducted during period of limited visibility). C. Maximize positioning of infantry and carriers such that rapid and covert mounting and subsequent maneuver is made possible. D. Element disengages either using overwatch or simultaneous movement of all troops (no overwatch). IAW FM 7-7, pages 5-57 through 5-59.

TRAINING OBJECTIVE: E092

TASK: Conduct a delay.

CONDITION: At night, as the platoon leader of a mechanized infantry platoon as part of a larger force which is delaying in order to slow the enemy's advance as much as possible while at the same time inflicting maximum equipment and personnel casualties upon the enemy.

STANDARD: CO, XO, PL, PSG, MGNR, SL, ASL insure that at night, the platoon, as part of the company/team operation, must accomplish the following: A. Prevent bypass by the enemy force. B. Maximize bounding overwatch, in reverse, by planning battle positions to the rear and by withdrawing just prior to becoming decisively engaged. C. Prepare battle positions in depth in an effort to support tanks and TOWs, which will do the bulk of the fighting, when they are attached. D. Provide local security for tanks and TOWs when those elements are attached. IAW FM 7-7, pages 5-59 through 5-61.

TRAINING OBJECTIVE: E093

TASK: Conduct a night or limited visibility attack.

CONDITION: As the platoon leader of a BIFV platoon (mounted or dismounted) operating as part of a larger force during the conduct of a night attack or an attack under conditions of limited visibility.

STANDARD: IAW FM 7-7J, PL, PSG, SL, ASL insure the platoon, as part of the company/team operation, must accomplish the following: A. Conduct a reconnaissance of the objective area and routes to the objective area. B. Rehearse the conduct of movement and assault in order to maximize control.

C. Adhere to all control measures as directed the team commander. D. Achieve surprise and exploit weak points of the enemy's defense as determined by way of the reconnaissance. E. Effect infiltration by moving in small elements at intervals along one route or along multiple routes. F. Maximize cover and concealment and provide for protection from a mounted enemy attack.

TRAINING OBJECTIVE: E094

TASK: Direct dismount of a Bradley M2.

CONDITION: At night, as the track commander of a Bradley squad moving against an enemy force and on order to deploy the dismount team.

STANDARD: IAW FM 7-7J, designate composition of dismount team, give dismount alert, and direct vehicle to be placed in a covered and concealed position.

TRAINING OBJECTIVE: E095

TASK: Control dismount element formations at night.

CONDITION: At night, as the leader of a dismount element moving in various tactical situations that require changes in formations and movement techniques.

STANDARD: IAW FM 7-7J, PL, PSG, MGNR, SL, ASL will select formations that provide security, allow fighting vehicle element to support, disperse the dismount teams, and provide a position from which maximum firepower can be placed on a known enemy position without jeopardizing security. Employ correct night movement techniques based on mission and likelihood of contact.

TRAINING OBJECTIVE: E096

TASK: Control mounted Bradley M2 platoon formations at night.

CONDITION: As the leader of a Bradley M2 platoon, at night, and moving mounted in various tactical situations that require a change in formation.

STANDARD: IAW FM 7-7J, PL, PSG, MGNR, SL, ASL will select the formation that provides maximum security, maximum firepower dispersion, and mutual support.

TRAINING OBJECTIVE: E097

TASK: Direct fire and maneuver of a Bradley M2 platoon at night.

CONDITION: As a platoon leader of a Bradley M2 platoon under fire, at night, conducting a movement to contact.

STANDARD: IAW FM 7-7J, PL, PSG, MGNR, SL, ASL will select position for base-of-fire force, direct fire of base-of-fire force, and direct actions of maneuver force.

TRAINING OBJECTIVE: E098

TASK: Direct actions on contact.

CONDITION: Given a Bradley M2 platoon that is part of a company team conducting a night movement to contact; the platoon suddenly encounters enemy direct fires.

STANDARD: IAW FM 7-7J, PL, PSG, MGNR, SL, ASL will direct the platoon to return fire and deploy to develop the situation and report to the company team commander.

TRAINING OBJECTIVE: E099

TASK: Conduct a night mounted assault (illuminated).

CONDITION: As the leader of a Bradley M2 platoon assaulting an objective, at night, as part of a company team. The enemy is occupying a hasty fighting position, and the terrain in the vicinity of the objective is suitable for rapid movement onto the objective and across it.

STANDARD: IAW FM 7-7J, PL, PSG, MGNR, SL, ASL, will control the movement of the Bradley M2s, direct the platoon fires, control indirect fires, and control illuminating fires.

TRAINING OBJECTIVE: E100

TASK: Conduct a night disengagement.

CONDITION: As the leader of a Bradley M2 platoon disengaging at night as part of a larger unit in contact.

STANDARD: IAW FM 7-7J, PL, PSG, MGNR, SL, ASL will prepare a disengagement plan, control vehicle movement, direct fire maneuver to the rear, maximize the firepower of the fighting vehicle team to cover rearward movement.

TRAINING OBJECTIVE: E101

TASK: Organize a night antiarmor ambush.

CONDITION: Given a mission to conduct a night antiarmor ambush, a location for the ambush, and a Bradley M2 squad.

STANDARD: IAW FM 7-7J, PL, PSG, MGNR, SL, ASL will organize the antiarmor ambush so that the squad can destroy enemy armored vehicles and provide fire support and security.

TRAINING OBJECTIVE: E102

TASK: Conduct a night antiarmor ambush

CONDITION: As the leader of a Bradley M2 squad task organized to conduct a night antiarmor ambush, given the ambush site.

STANDARD: IAW FM 7-7J, PL, PSG, MGNR, SL, ASL will destroy or disable enemy vehicles without being discovered before the ambush is executed.

TRAINING OBJECTIVE: E103

TASK: Conduct night defensive military operations in urban terrain.

CONDITION: As the leader of a Bradley M2 platoon that is part of a larger force defending in urban terrain, at night, given a sector to defend.

STANDARD: IAW FM 7-7J, PL, PSG, MGNR, SL, ASL will employ the fighting vehicle teams and dismounted teams in their proper roles. Position the platoon, using urbanized terrain to maximize weapons capability.

TRAINING OBJECTIVE: E104

TASK: Control movement through urban terrain at night.

CONDITION: As the leader of a Bradley M2 platoon operating as part of a larger unit moving through urban terrain, at night, given a mission to move through urban terrain to an objective.

STANDARD: IAW FM 7-7J, PL, PSG, MGNR, SL, ASL, will employ the proper movement techniques into and through the urban terrain.

ANNEX F: SAFETY

TRAINING OBJECTIVE: F001

TASK: State the safety requirements in the following areas of general safety: vehicle movement, hull, turret, and maintenance safety.

CONDITION: At night, given an M2 with complete equipment.

STANDARD: The unit should know and be able to comply with all safety considerations applicable to the M2 as contained in FM 9-2350-252-10-2, local regulations and SOPs.

TRAINING OBJECTIVE: F002

TASK: Extinguish a fire on the M2.

CONDITION: Given an M2, with squad and a fire anywhere in the vehicle.

STANDARD: IAW FM 9-2350-252-10-2, local regulations and SOP, the unit must accomplish the following: A. Alert other squad members. B. Evacuate the vehicle. C. Extinguish fire with fixed and/or portable fire extinguishers.

TRAINING OBJECTIVE: F003

TASK: Evacuate a casualty from an M2.

CONDITION: At night, given an M2 with complete equipment and a simulated injury to a squad member.

STANDARD: All soldiers will evacuate a casualty following the correct procedures and utilizing the correct hatches to minimize injury. Reference: TM 9-2350-252-10-2.

TRAINING OBJECTIVE: F004

TASK: Conduct night movement of an M2 using ground guides.

CONDITION: Given an M2, at night, in a field environment, with 2 assistants, and flashlights.

STANDARD: The soldier, IAW FM 9-2350-252-10-2, local regulations and unit SOPs, will when acting as a Bradley commander, utilize the proper visual signals to safely start, move, and stop the M2 over a 50 meter course using varied terrain and vegetation.

SECTION V

Equipment and Ammunition Summary

<u>TRAINING OBJECTIVE</u>	<u>EQUIPMENT</u>	<u>EQUIPMENT-TO-SM RATIO</u>	<u>AMMUNITION</u>	<u>AMMUNITION-TO-SM RATIO</u>
A001-004	AN/PVS-4, Individual Weapon	1:1		
A005-008	AN/TVS-4	1:3		
A009-012	AN/TVS-5, Crew-Served Weapon	1:BIFV Crew		
A013-016	AN/PVS-5	1:3		
A017-020	AN/PAS-7	1:3		
A021-024	AN/TAS-6	1:3		
A025-028	AN/TAS-5	1:3	DRAGON, Inert	1:3
A029-032	AN/VVS-2; BIFV, M2	1:1		
A033-036	AN/TRS-2	1:BIFV Platoon		
A037	M19(7X50) Binoculars	1:3		
B001	BIFV, M2; GAA	1:BIFV Crew		
B002	BIFV, M2	1:BIFV Crew		
B003	BIFV, M2	1:BIFV Crew		
B004	BIFV, M2	1:BIFV Crew		
B005	M16, Cleaning Kit	1:1		
B006	M231, Cleaning Kit	1:1		
B007	M240C; BIFV, M2	1:BIFV Crew		
B008	BIFV, M2; M242	1:BIFV Crew		
B009	BIFV, M2; M257, Cleaning Equipment	1:BIFV Crew	Dummy Smoke Grenades For M257	8:1
B010	M202A1	1:3		
C001	M16	1:1		

TRAINING OBJECTIVE	EQUIPMENT	EQUIPMENT-TO-SM RATIO	AMMUNITION	AMMUNITION-TO-SM RATIO
C002	M203	1:1		
C003	M249 SAW	1:2		
C004	M231 FPW; BIFV, M2	1:BIFV Crew		
C005	M231 FPW w/Magazine	1:1	5.56 Dummy or Blank	30:1
C006	M231 FPW w/Magazine	1:1	5.56 Dummy or Blank	30:1
C007			HEDP M433 CS M651 SP M583, 661, M662 SC M585, M663, M664 GM 713, 715, 716	1:1 1:1 1:1 1:1 1:1
C008	BIFV, M2 w/Dummy TOW Missile	1:BIFV Crew		
C009	BIFV, M2 w/Dummy TOW Missile	1:BIFV Crew		
D005-006	BIFV, M2	1:Crew		
D007-009	BIFV, M2 w/Complete BIFV MILES			
D010	M16A2	1:1		
D011-012	M16A2 w/AN/PVS-4 and Magazine	1:1	5.56 Ball	18:1
D013	M203	1:1		
D014	M203 w/AN/PVS-4	1:1		
D015	M203 w/AN/PVS-4 and magazine	1:1	40mm, M407A1	3:1
D016	M60A1 MG w/AN/PVS-4	1:1	7.62 Link (4:1)	20:1
D017	M60A1 MG w/AN/PVS-4	1:1	7.62 Link (4:1)	200:1
D018	M249 SAW w/AN/PVS-4		5.56 Link (4:1)	20:1
D019	M249 SAW w/AN/PVS-4		5.56 Link (4:1)	200:1
E026-028	1:50,000 Scale Map, M1 Compass, Protractor	1:1		

TRAINING OBJECTIVE	EQUIPMENT	EQUIPMENT-TO-SM RATIO	AMMUNITION	AMMUNITION-TO-SM RATIO
E029-045	BIFV, M2; AN/PVS-5	1:BIFV Crew		
E046-055	BIFV, M2 w/MILES Individual Weapons w/MILES	1:BIFV Crew	DRAGON w/MILES	1:BIFV Crew
E056	BIFV, M2		HEIT (Inert) APDS (Inert)	230:BIFV 70:BIFV
E058	TA-312/PT (or TA-1PT) w/Wire or PRC-77 w/BA-4386	1:LP/OP		
E059	AN/TRS-2	1:BIFV PLATOON		
E060-061	M1 Compass, Barrier Material to Cover Platoon Frontage	1:BIFV Platoon	M21 (Inert) M16A1 Mines (Inert)	
E063	BIFV, M2 w/BIFV MILES Complete	1:BIFV Crew		
E065	BIFV, M2; AN/PVS-4 BA-1100	1:BIFV Crew 5:AN/PVS-4		
E066	WD-1 TT Crimpers	25':1 1:1	M49A1 Flare M3 Pull Device Non-electric Blasting Cap	1:1 1:1 1:1
E067	AN/TRS-2	1:BIFV Platoon		
E068-104	BIFV, M2 M17 NBC Mask Individual Weapon NBC Garments M58A1 Decon Kit M11 Decon Apparatus Individual Weapon MILES DRAGON MILES VIPER w/MILES BIFV MILES Complete	1:BIFV Crew 1:1 1:1 1:1 1:1 1:BIFV 1:1 1:BIFV 5:BIFV 1:BIFV	5.56mm, Blank 7.62mm, Blank Ground Flares SC M585, M663, M664 SP M583, 661, 662 GM M713, 715, 716	120:1 800:1 100:BIFV Company 10:Platoon 10:Platoon 10:Platoon
F001-003	BIFV, M2 Complete	1:BIFV Crew		

SECTION VI
TRAINING OBJECTIVES TO REFERENCES CORRELATION

<u>TRAINING OBJECTIVES</u>	<u>REFERENCES</u>
A001-004	TM 11-5855-312-10
A005-008	TM 11-5850-228-13
A009-012	TM 11-5855-214-10
A013-016	TM 11-5855-238-10
A017-020	TM 11-5855-246-10
A021-024	TM 11-5855-253-10
A025-028	TM 9-1425-484-10
A029-032	TM 9-2350-252-10
A033-036	TM 11-5895-1047-10
B001	TM 9-2350-252-10-1, STP 7-11M1-SM, LO 9-2350-252-12
B002	DA PAM 738-750; TM 9-2350-252-10-1, TM 9-2350-252-10-2
B003	TM 9-2350-252-10-1, STP 7-11M1-SM
B004	DA PAM 738-750, TM 9-2350-252-10-2
B005	FM 21-2, TM 9-1005-249-10
B006	TM 9-1005-309-10, STP 7-11M1-SM
B007	TM 9-1005-315-10-2, STP 7-11M2-SM
B008	TM 9-2350-252-10-2, STP 7-11M2-SM
B009	TM 9-2350-252-10-2, STP 7-11M2-SM
C001	STP 7-11M1-SM
C002	STP 7-11M1-SM
C003-006	TM 9-1005-201-10, STP 7-11M2-SM
C007	TM 9-1010-221-10, FM 23-3, STP 7-11M2-SM
C008-009	TM 9-2350-252-10-1, 9-2350-252-10-2, STP 7-11M1-SM

VIA01

<u>TRAINING OBJECTIVES</u>	<u>REFERENCES</u>
D001-002	FM 23-9, TC 23-11, STP 7-11M2-SM
D003-009	FM 23-1, TM 9-2350-252-10-2, STP 7-11M1, 2-SM
D010	STP 7-11M1-SM, FM 23-9
D011-012	STP 7-11M1-SM, TM 11-5855-213-10
D013	STP 7-11M1-SM
D014-017	STP 7-11M1-SM, TM 11-5855-213-10
D018-019	No references currently available
E001	FM 7-10, 7-20, 100-5
E002-005	FM 7-20, 71-1, 71-2, 7-7J
E006	FM 7-7J, 71-1, 71-2
E007	FM 5-34, 7-10, 7-20
E008-009	FM 71-2J
E010-011	FM 90-10, 90-10-1, 71-2, 100-5
E012	FM 7-7J
E013-014	FM 90-10-1, 90-10, 71-2, 100-5
E015	FM 6-20, 101-31-1
E016-022	FM 3-4, 3-50, 3-87, 3-100; FC 21-41
E023	FM 90-10-1
E024	FC 7-170
E025	FM 5-36, Ranger Handbook
E026-028	FM 21-26
E029-035	TM 9-2350-252-10-2
E036-040	TM 9-2350-252-10-1
E041	FM 21-17
E042-044	TM 9-2350-252-10-1, STP 7-11M1-SM

<u>TRAINING OBJECTIVES</u>	<u>REFERENCES</u>
E045	FM 21-7, 21-306
E046-055	STP 7-11M34-SM; FM 7-7J, 7-8
E056	TM 9-2350-252-10-2
E057-058	STP 7-11M34-SM
E059	FM 7-7J, STP 7-11M34-SM, TM 11-5895-1047-10
E060	TM 7-7J
E061	GTA 5-10-27, STANAG 2036, STP 7-11M34-SM
E062-063	FM 7-7J, 7-8, STP 7-11M34-SM
E064	STP 7-11M1-SM
E065-066	TM 11-5855-213-10, STP 7-11M1-SM
E067	FM 5-25, 5-34, 20-32, TM 9-1345-203-12 &P, STP 7-11M2-SM
E068	TM 11-5895-1047-10, STP 7-11M2-SM
E069	FM 7-7J
E070	FM 7-7J, STP 7-11M1-SM
E071-081	FM 7-7J, 7-8, 21-48, 3-5, 21-40; STP 7-11M34-SM, Ranger Handbook
E082-084	FM 21-40, 3-5, 21-48
E085	FM 7-7J, 21-75-2
E086	FM 7-8, STP 7-11M34-SM
E087	FM 7-7J, 21-48, 21-2, 3-5, 21-3, TM 11-6665-209-10, 11-6665-232-12
E088-094	FM 7-7J, STP 7-11M34-SM
E095-104	FM 7-7J
F001-003	FM 9-2350-252-10-2 Applicable local regulations, and unit SOP

SECTION VII

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SECTION VIII

Training Grid: Correlation of Training Objective to Duty Position by Training Quarter

<u>TRAINING OBJECTIVE</u>	<u>*DUTY POSITION THAT MUST BE FAMILIAR WITH THE TRAINING OBJECTIVE</u>	<u>QUARTER TO BE TRAINED</u>
A001-004	CO, XO, PL, PSG, MGNR, SL, ASL, GNR, DVR, RATELO, AAS, AR, G, R/S	4, 3, 2, 1
A005-008	CO, XO, PL, PSG, SL, ASL	4, 3, 2, 1
A009-012	PL, PSG, MGNR, SL, ASL, AR	4, 3, 2, 1
A013-016	CO, PL, PSG, MGNR, SL, ASL	4, 3, 2, 1
A017-020	CO, PL, PSG, MGNR,	4, 3, 2, 1
A021-024	CO, XO, PL, PSG,	4, 3, 2, 1
A025-028	PL, PSG, MGNR, SL, ASL, AAS	4, 3, 2, 1
A029-032	PL, PSG, DVR, PSG	4, 3, 2, 1
A033-036	PL, PSG, MGNR, SL	4, 3
A037	CO, XO, PL, PSG, MGNR, SL, ASL, RATELO, AAS, AR, G, R/S	4, 3, 2, 1
B001	PL, PSG, MGNR, SL, ASL, GNR, DVR, RATELO, AAS, AR, G, R/S	4, 3, 2
B002	CO, XO, PL, PSG, MGNR, SL, ASL	4, 3, 2
B003-006	PL, PSG, MGNR, SL, ASL, GNR, DVR	4, 3, 2
B007-008	PL, PSG, MGNR, SL, ASL,	4, 3, 2
B009-011	PL, PSG, MGNR, SL, ASL, GNR	4, 3, 2
C001	PL, PSG, MGNR, SL, ASL, GNR, DVR, RATELO, AAS, G, R/S	3, 1
C002	PL, PSG, SL, ASL, G	3, 1
C003	PL, PSG, MGNR, SL, ASL, AR,	3, 1
C004-006	PL, PSG, MGRN, SL, ASL, GNR, DVR, RATELO, AAS, AR, G, R/S	3, 1
C007	PL, PSG, SL, ASL, G,	3, 1
C008-009	PL, PSG, MGNR, SL, ASL, RATELO, AAS, AR, G, R/S	3, 1

TRAINING OBJECTIVE	*DUTY POSITION THAT MUST BE FAMILIAR WITH THE TRAINING OBJECTIVE	QUARTER TO BE TRAINED
D001-002	CO, PL, PSG, MGNR, SL, ASL, GNR	3, 1
D003-004	CO, XO, PL, PSG, MGNR, SL, ASL, GNR, DVR, AAS, AR, G, R/S	3, 1
D005	CO, PL, PSG, MGNR, SL, ASL, GNR, DVR,	3, 1
D006-009	CO, PL, PSG, MGNR, SL, ASL, GNR	3, 1
D010-12	PL, PSG, MGNR, SL, ASL, RATELO, AAS, R/S	3, 1
D013-015	G	3, 1
D016-019	AR (For future use)	
E001-014	CO, XO, PL	4, 3
E015	CO, XO, PL, PSG	4, 3, 2, 1
E016-019	CO, XO, PL	4, 3, 2, 1
E020-021	CO, XO	4, 3, 2, 1
E022	CO, XO, PL	4, 3, 2, 1
E023	CO, XO, PL, PSG, MGNR, SL, ASL	4, 3, 2, 1
E024	CO, XO, PL	4, 3, 2, 1
E025	CO, XO, PL, PSG, MGNR, SL,	4, 3, 2, 1
E026	CO, XO, PL, PSG, MGNR, SL, ASL, GNR, DVR, RATELO, AAS, AR, G, R/S	4, 3, 2, 1
E027-028	CO, XO, PL, PSG, MGNR, SL, ASL, GNR, DVR, RATELO, AAS, AR, G, R/S	4, 3, 2, 1
E029-035	CO, PL, PSG, MGNR, SL, ASL, GNR	4, 3, 2, 1
E036	PL, PSG, MGNR, SL, ASL	4, 3, 2, 1
E037-038	PL, PSG, MGNR, SL, ASL, DVR	4, 3, 2, 1
E039-040	XO, PL, PSG, MGNR, SL, ASL, DVR	4, 3, 2, 1
E041-043	CO, XO, PL, PSG, MGNR, SL, ASL, GNR, DVR, RATELO, AAS, AR, G, R/S	4, 3, 2, 1
E044-049	CO, XO, PL, PSG, SL, ASL, DVR	4, 3, 2, 1
E050-051	PL, PSG, MGNR, SL, ASL	4, 3, 2, 1

<u>TRAINING OBJECTIVE</u>	<u>*DUTY POSITION THAT MUST BE FAMILIAR WITH THE TRAINING OBJECTIVE</u>	<u>QUARTER TO BE TRAINED</u>
E052-055	CO, XO, PL, PSG, MGNR, SL	4, 3, 2, 1
E056	PL, PSG, MGNR, SL, ASL, RATELO, AAS, AR, G, R/S	4, 3, 2, 1
E057-058	PL, PSG, MGNR, SL, ASL	4, 3, 2, 1
E059-061	PL, PSG, SL, ASL	4, 3, 2, 1
E062-063	PL, PSG, MGNR	4, 3, 2, 1
E064-069	PL, PSG, SL, ASL, RATELO, AAS, AR, G, R/S	4, 3, 2, 1
E070-079	PL, PSG, SL, ASL	4, 3, 2, 1
E080	CO, XO, PL, PSG, MGNR, SL, ASL, GNR, DVR, RATELO, AAS, AR, G, R/S	4, 3, 2, 1
E081	PL, PSG, SL, ASL	4, 3, 2, 1
E082-083	CO, XO, PL, PSG, MGNR, SL, ASL, GNR, DVR, RATELO, AAS, AR, C, R/S	4, 3, 2, 1
E084-092	CO, XO, PL, PSG, MGNR, SL, ASL	4, 3, 2, 1
E093-104	PL, PSG, SL, ASL	4, 3, 2, 1
F001-003	CO, XO, PL, PSG, SL, ASL, GNR, DVR, RATELO, AAS, AR, G, R/S	4, 3, 2, 1

*COMPANY COMMANDER (CO), COMPANY EXECUTIVE OFFICER (XO), PLATOON LEADER (PL), PLATOON SERGEANT (PSG), MASTER GUNNER (MGNR), SQUAD LEADER (SL), ASST SL (ASL), GUNNER (GNR), DRIVER (DVR), RADIO TELEPHONE OPERATOR (RATELO), ANTI-ARMOR SPEC (AAS), AUTO RIFLE (AR), GRENADIER (G), SNIPER (R/S)

SECTION VIII

ANNEX A: QUARTERLY TRAINING GOALS BY SUBJECT

QUARTER	A STANOS DEVICES	B MAINT	C WEAPONS	D GUNNERY	E TACTICS	F SAFETY
1	XA (MINUS TRS-2)		XA	XA, C	INDIVIDUAL A SQD C	XA
2	XB (MINUS TRS-2)	XA, C			SQUAD C PLT C	XA
3	XC	XB, D	XB	XB, D	PLATOON C, D CO C	XA
4	XD	XB, D			COMPANY C, D	XA

NOTE: (1) "X" indicates those annexes that should be trained during a certain quarter.

(2) A, B, C, or D indicates the following level or type training required:

- A: Individual task mastery/proficiency.
- B: Sustainment/reinforcement training.
- C: Unit task mastery/proficiency. (Entire unit, element, or selected individuals able to perform tasks as a team: e.g., all of squad performs combat vehicle loading, as a unit/team.)
- D: Unit task sustainment/reinforcement training.

(3) Tactics is intended to be trained as a build-up process, culminating in a company exercise. Column "E" depicts a suggested training program (i.e., 3/4 of time shown in column "E" (1st quarter) is dedicated to individual training and 1/4 of the time is dedicated squad training).

SECTION IX

Distribution of STANO Devices in the BIFV Infantry Battalion

	J210-INF BN MECH E/W BIFV	J210 HHC	J210 RIFLE CO.
AN/PVS-4	74	26	9
AN/TVS-5	42	30	2
AN/PVS-5	208	75	25
AN/TVS-4	2	2	--
AN/PAS-7	14	2	3
AN/TAS-6	9	2	1
AN/TAS-5	36	--	9
AN/TRS-2	14	2	3
AN/GVS-5	3	3	--
AN/UAS-11	10	3	1
AN/UAS-12	12	--	--
AN/PSS-11	3	--	--
M2 T1S	54	--	13

NOTE: See Section V
for Allocation of
Equipment by Task

AN/PVS-4 = NIGHT VISION SIGHT (INDIVID)

AN/TVS-5 = NIGHT VISION SIGHT (CREW)

AN/PVS-5 = NIGHT VISION GOGGLES

AN/TVS-4 = NIGHT VISION SIGHT (TRIPOD MOUNT)

AN/PAS-7 = HAND HELD THERMAL VIEWER

AN/TAS-6 = THERMAL VISION SIGHT (NOD/LR)

AN/TAS-5 = THERMAL VISION SIGHT (DRAGON)

AN/TRS-2 = PLT EARLY WARNING SYSTEM

AN/GVS-5 = HAND-HELD LASER RANGE FINDER

AN/UAS-11 = NIGHT VISION SET (w/AN/TAS-5)

AN/UAS-12 = NIGHT VISION SET (w/AN/TAS-4)

AN/PSS-11 = DETECTING SET MINE

M2 T1S = INTEGRATED SIGHT UNIT ISU